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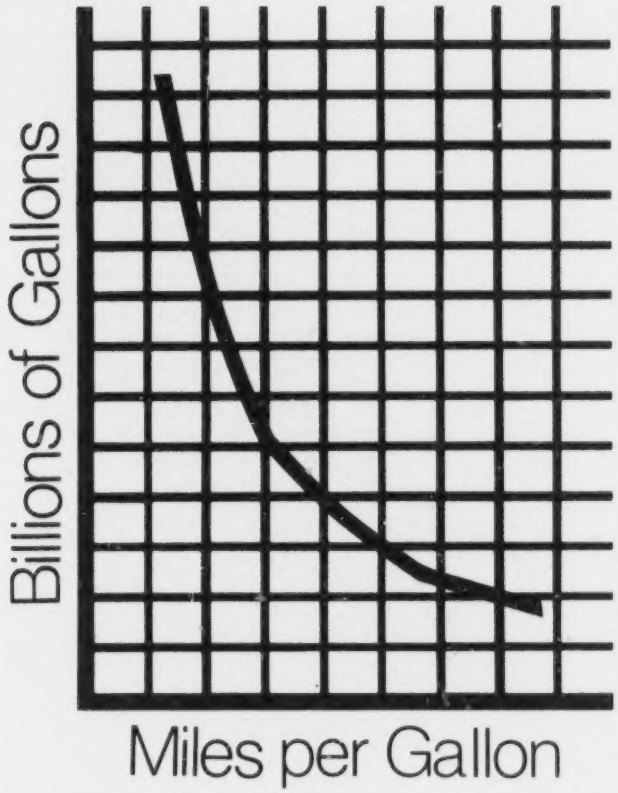

■ what do the ■

25 largest oil companies have to say about gasoline marketing in 1982?

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INTRODUCTION

What Do the 25 Largest Oil Companies Have to Say About Gasoline Marketing in 1982?

The American public continues to buy a lot of gasoline. In 1981 about 103,000,000,000 (103 billion) gallons of gasoline were sold at retail in the United States. The average price paid was $1.35 per gallon. Gasoline selling is a $139,000,000,000 (139 billion dollar) business. It is 4.7% of the gross national product, 7.5% of total personal expenditures, and 8.6¢ of every dollar spent on non-durable goods and services.

Even at that, there were 13,000,000,000 (13 billion) less gallons of gas sold in 1981 than were sold in 1978. It's the third successive year of decreased consumption. The only other year since the invention of the automobile that gasoline consumption did not increase was in 1974. In percentage terms, the cumulative consumption decrease since the high water mark of 116 billion gallons in 1978 represents an 11% decrease. It's apparent after reviewing the outlook for the coming years that consumption decreases have barely begun to occur.

When we write about the gasoline marketing business in this report, we are writing about the retail end of the oil business. Forty-four and one-half percent of the output of United States refineries is gasoline. Gasoline does not stand alone; events that affect gasoline consumption affect the entire oil business. Gasoline marketing describes how customers exchange money for gasoline. It's the end purpose of half of the oil business. For most people, this exchange takes place at the gasoline station near where they work or live. Their impression of oil companies is usually formed as they buy their gas and interact with the attendant who assists them.

The history of gasoline marketing has always been turbulent, and the business has been extremely competitive. Until 1973, there was always more gasoline for sale than there were buyers. Oil companies, who have been the traditional marketers, have competed fiercely between themselves in both price and non-price areas to maximize their sales. Many strategies have been worked out and executed to increase the sales and market shares of the competing companies.

Last year we said that gasoline marketing was at the crossroads. Alas, the crossroads has been passed. Gasoline marketing is a declining business. The oil industry has gone through the supply contortions of the seventies, which were caused by governmental price controls and Mideast politics. These disruptions and the resulting price escalation have changed the size of the market for gasoline. The shortages and resultant price rises gave false signals to oil company planners of a potentially infinite and insatiable market. The results are world oversupply of crude product and domestic overcapacity of refining facilities.

What are the oil companies doing about their marketing problems? Only they can say, and apparently they have just begun to address the situation. In recent years, they have been able to sell all of the product they could produce. To suggest an increase in consumption has become the height of immorality. Their marketing staffs have been reduced to minimal levels. Traditionally, marketing has been a problem for other industries, not for the oil business. Right now, marketing is the number one problem for the oil companies.

We developed this report because we are in the gasoline marketing business and wanted to know what the managers of companies that refine the most gasoline were thinking about gasoline markets. We assumed that companies finding the oil, producing the crude, refining the product, and controlling most of the retail gasoline outlets in the country would be thinking a lot about gasoline marketing.

We published the first report a year ago. To find out oil company thinking we went to their annual reports. We selected the 25 largest oil refiners on the basis of their refinery outputs. These 25 companies have the capacity to refine 78% of the gasoline that can be produced in this country. All of the companies are publicly owned, and the managements generally have less than a 1% ownership interest. Some of the companies have almost 400,000 stockholders. The annual report is the principal form of communication between management and stockholders. Management philosophies, policies, thrusts, programs, and approaches to problems and opportunities are generally apparent in their annual reports.

We have gone through the annual reports of these companies and extracted every reference and every picture pertaining to gasoline marketing. These are reproduced here exactly as they appeared in the annual reports.

We then sent a letter to the highest ranking marketing officer of each of the companies. If we could not identify a marketing officer, we sent the letter to the chief executive of the company. Copies of that letter and the marketing department's responses are included in this survey. Compared to 1981, a higher percentage of companies responded to this year's request.

THE ANNUAL REPORTS

Oil company annual reports are impressive. They are generally thick publications, well written, printed on quality paper, and full of impressive photography. There is, however, a striking similarity among reports. One might even conclude that they are the product of a single company that specializes in this type of publication. At the least, the production staffs must read the reports and copy the formats of the other companies. In these annual reports, the photographs pinpoint the items that management considers important to the oil industry. Most of the photographs are of offshore oil platforms, oil tankers, petrochemical plants, refineries, and oil piping in general. This year the reports all mention the problems of adjusting to decontrol, oil processing improvements, exploration successes, technological change, energy security, and optimism for the future of the company.

Space devoted to gasoline marketing increased by 32% over 1980, while the size of the average annual report remained constant. In the pages that follow, you will be able to compare the difference between the 1980 and 1981 reports for each company and then contrast it with similar information for the other companies. This provides you with a synopsis of the marketing plans for the 25 individual companies and for the industry as a whole.

EXXON CORPORATION

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$110,380,629,000	$115,148,321,000
Earnings	5,650,090,000	5,567,481,000
Number of Employees	177,000	180,000
Return on Average Shareholder's Equity	23.6%	20.6%
United States Motor Gasoline Sales as a Percentage of Exxon World Wide Sales (by Barrels)	11.0%	10.4%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	3	2
Refineries	1	3
U.S. Gasoline Pumps	None	1
Gasoline Station Employees	None	None
Coal Mines	None	1
Corporate Citizenship	3	None
Background of Chief Executive		Chemical Engineering
Percentage of Company Stock Owned by Corporate Officers and Directors	1/10 of 1%	1/10 of 1%
Number of Pages in Annual Report	52	52
Number of Pages Devoted to Gasoline Marketing	1/4 page	2/3 page

Number of Exxon Gasoline Stations in the United States:

12-31-81	20,585
12-31-80	22,886
12-31-79	N/A
12-31-76	N/A
12-31-71	N/A

What the Exxon Annual Report Says About Gasoline Marketing:

The look of the future is exemplified by this Dallas service station, one of several prototype stations around the world which introduced Exxon's new retail identification system in 1981. To be phased in over the next few years, the system covers service station architecture, lighting, signs, pumps and product packaging. It features simple, clean lines as well as stronger identification and more consistency in the use of trademarks, integrated in what a national magazine calls a "quietly assertive unit that should calm America's roadside clutter." Existing stations can be modified to incorporate the new design at a relatively modest cost. The fuel pump shown here is the multi-product dispenser introduced in 1981 by Exxon's Gilbarco affiliate.

Refining and Marketing

We will continue to restructure our refining and marketing operations in light of changes in the marketplace, including the shift in demand from heavy fuel oil toward lighter products. Shutdowns, the conversion of refineries to produce lighter products, and the consolidation of marketing facilities are all elements of our strategy to be an efficient manufacturer and marketer of high value-added products.

Page 3

Page 11

Excerpt from the Annual Report of Exxon Corporation, December 31, 1981

STANDARD OIL COMPANY OF CALIFORNIA (CHEVRON)

YEAR ENDED DECEMBER 31st

	1980	1981
Sales	$ 41,553,474,000	$ 45,229,000,000
Earnings	2,400,779,000	2,380,000,000
Number of Employees	40,218	43,281
Return on Average Shareholder's Equity	21.7%	20.0%
United States Motor Gasoline Sales as a Percentage of Chevron Worldwide Sales (by Barrels)	18.9%	17.8%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	3	2
On Shore Oil Rigs	–	3
Refineries	3	3
U.S. Gasoline Pumps	None	None
Gasoline Station Employees	1	1
Coal Mines	None	None
Corporate Citizenship	2	1
Research	–	2
Background of Chief Executive	Chemical Engineering	Chemical Engineering
Percentage of Company Stock Owned by Corporate Officers and Directors	1/10 of 1%	1/5 of 1%
Number of Pages in Annual Report	56	53
Number of Pages Devoted to Gasoline Marketing	1 page	1-1/3 page

Number of Chevron Gasoline Stations in the United States:

12-31-81	11,586
12-31-80	12,139
12-31-79	12,615
12-31-76	N/A
12-31-71	N/A

Chevron supplied a total of 21,300 retail outlets in 1981 (From 10K)

Marketing

The Company and its affiliates sell petroleum products throughout the world and ranks as one of the largest manufacturers and marketers of paving and industrial asphalts. The Company's principal trademark identifying the petroleum products marketed is "Chevron." Domestic sales of refined petroleum products by the Company during 1981 amounted to 1,141,000 barrels daily, equivalent to 7.1% of total U.S. consumption. Worldwide sales, including the Company's share of affiliates' sales, were 2,173,000 barrels daily in 1981 or approximately 4.5% of the Free World's total.

In the United States, the Company has service station operations in 39 states and the District of Columbia, and is the leading gasoline marketer in the Pacific Coast and southeastern states regions. At year-end 1981, the Company had almost 13,000 retail outlets selling its branded products throughout the domestic marketing area. It also markets in Western Canada, Central America and Puerto Rico. Sales in Eastern Canada are through a jointly owned affiliate which is a leading marketer in that area.

Reduced sales of petroleum products reflect the continuing worldwide trend toward greater conservation and more fuel-efficient automobiles and equipment. The Company closely monitors these shifting market patterns and adapts to them as quickly as practicable. Extensive modernization of service stations, expansion into more promising markets and closing uneconomic outlets are all part of a five-year program begun in 1980 to modify the Company's retail outlet network so as to maintain a profitable position in markets where it operates.

Excerpts from 10K, pages 17 & 18

What the Standard Oil of California Annual Report Says About Gasoline Marketing:

Despite the soft demand for petroleum products which severely reduced refinery output for the oil industry, our U.S. refineries operated at 74 percent of capacity in 1981; the national average was 66 percent.

Page 14

DOMESTIC MARKETING

The reduced demand for petroleum products in the United States has accelerated competition in the marketplace. With an increasing number of fuel-efficient cars traveling America's roads, with a conservation ethic becoming increasingly popular in the country, and, with the end of price and allocation controls early in 1981, the Company has seen many changes in the petroleum marketing business.

Page 16

Lower demand also accelerated competition in the gasoline marketplace. In response, we are helping our dealers cultivate and retain customers, emphasizing service and quality of products.

Page 16

Excerpt from the Annual Report of Standard Oil Company of California, December 31, 1981

For the first time since 1972, the Company is advertising gasoline, with "Lean Machine Gasoline" television and radio ads which point out the quality advantages of our fuel. We are not encouraging consumers to increase their gasoline consumption, but merely to try Chevron products and service and compare the performance qualities to those offered by the competition.

Our "Back to Basics" Program is helping our dealers to operate in this renewed, competitive atmosphere; nearly 70 percent of them have never functioned in a market free of price and allocation controls. The program reemphasizes competitive operating hours and pricing along with cleanliness and service as a way to cultivate and retain customers.

The Company began trials last year of an Intelligent Engine Analyzer. It is located in the bay of a service station and linked to a central computer serving many stations. The analyzer is connected to eight reference points on the car; by entering the make, model and year into the computer, the mechanic can ascertain where the car does not meet performance specifications. It will also suggest the possible cause of the problem, and identify the replacement parts that may be needed and their cost.

Over the next five years we will be building a limited number of new service stations to address new business opportunities and develop market strength. To a much greater extent we will upgrade stations at prime locations. In 1981, we approved 10 new stations and 48 partial or total reconstructions. Meanwhile, we will continue to eliminate service stations that are unprofitable.

Marketing Representative Diana Vavrek and Station Manager Jim Jones discuss the impact on sales of Techron, the Company's new gasoline additive.

In 1981, we completed our changeover from leaded Chevron Supreme gasoline to Chevron Supreme Unleaded gasoline in all our markets except Hawaii, Alaska and the Rocky Mountain area. We also began the trial marketing of a new gasoline additive, Chevron Techron Gasoline Additive, which, by reducing combustion chamber deposits, lowers an engine's octane

Pages 17 & 18

SHELL OIL COMPANY

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 19,959,000,000	$ 21,739,000,000
Earnings	1,542,000,000	1,701,000,000
Number of Employees	36,596	37,273
Return on Average Shareholder's Equity	22%	21%
United States Motor Gasoline Sales as a Percentage of Shell Worldwide Sales (by Barrels)	57.2%	56.9%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	1	2
On Shore Oil Rigs	–	–
Refineries	1	4
U.S. Gasoline Pumps	2	1
Gasoline Station Employees	None	1
Coal Mines	2	2
Corporate Citizenship	3	0
Research	–	3
Background of Chief Executive	Geologist	Geologist
Percentage of Company Stock Owned by Corporate Officers and Directors	27/100th of 1%	34/100th of 1%
Number of Pages in Annual Report	60	67
Number of Pages Devoted to Gasoline Marketing	3	5

Number of Shell Gasoline Stations in the United States:

12-31-81	13,700
12-31-80	15,400
12-31-79	16,500
12-31-76	19,200
12-31-71	N/A

Marketing

Shell distributes oil products principally under the trademark "Shell" or a trademark in which the word "Shell" appears. Oil marketing operations are carried out through transportation systems, terminals, bulk distributing plants and, at the end of 1981, approximately 13,700 service stations displaying Shell trademarks.

Excerpt from 10K, page 4

Products

1981 Highlights

Performed well in Oil Products by emphasizing cost control to help offset the effects of lower demand.

Continued our programs to streamline the Company's marketing network and logistical system and modernize refineries, to keep Shell's Oil Products operations among the most efficient and profitable in the United States.

Had a difficult year in Chemical Products, reflecting underutilized capacity coupled with weak demand due to general economic slowdown; stressed cost control to minimize our earnings decline.

Advanced in emerging business activities, starting a joint venture in solar energy and making interferon.

Shell has two primary strategic objectives in Oil Products: to remain among the most efficient and profitable of the major domestic petroleum companies, and to position ourselves to perform well in periods of crude oil shortage, oversupply or relative supply/demand balance.

In Chemical Products, our basic strategy is to invest selectively for continued cost efficiencies in all our major chemical product lines, and for expanded capacity in those products and markets where Shell Chemical Company has especially strong positions.

In implementing these strategies, we manage Oil and Chemical Products as an integrated organization in order to utilize the Company's resources most efficiently. Integration gives us the flexibility to direct hydrocarbon feedstocks to those oil or chemical products with the best relative returns and strongest market demand. Long term, we can focus our people, research programs and capital investments where they are expected to generate the highest profits; strong growth businesses — whether in Oil Products or Chemical Products — get the most support.

Oil Products

In Oil Products, we continued to concentrate where we can compete best.

We are building around our logistical, product and regional market strengths. Our goal is to improve current and long-term profits by constantly optimizing raw material and product yields and by investing in cost efficiency projects and consolidating or disposing of marginally attractive operations. This strategy continued to pay off in 1981. We believe our Oil Products return on investment remained above the domestic petroleum industry average.

The past eight years has been a period of great volatility and unpredictability for the petroleum industry, as illustrated by the on-again, off-again availability of crude oil in world markets, erratic oil prices and (during the past three years) declining consumer demand. These conditions point to a very challenging operating environment in the years ahead.

Yet, we remain optimistic about the future because we have taken steps to remain competitive in good times or bad. We are seeking to minimize risk and compete effectively during oil oversupply or shortage through efficient operations and by developing stable long-term crude oil supplies. We believe these programs benefit the Company and its shareholders, as well as consumers who rely on Shell for oil products.

Oil Products net income increased 13 percent to $360 million in 1981.

We are pleased with this performance, particularly in light of the year's erratic market conditions.

Shell's total refined product sales volume declined 11 percent. Despite this decline and higher crude oil and operating costs, earnings increased due to refinery efficiencies, higher average selling prices, stable marketing costs, and higher investment tax credits largely associated with our refinery modernization program in California.

Page 20

Maintain our Oil Products business among the most profitable and efficient in the industry, able to prosper in times of shortage or surplus.

We feel we are well positioned to continue outperforming our competitors because of our cost-efficient operating and marketing programs. These programs and other, related strengths include retail consolidation, secure crude oil supplies, a balanced mix of light products, logistically well-placed markets, and refineries able to produce the products we need from crudes of varying quality. We believe our return on investment from Oil Products will continue well above the average of our major competitors, and that the business will continue generating substantial cash and net income.

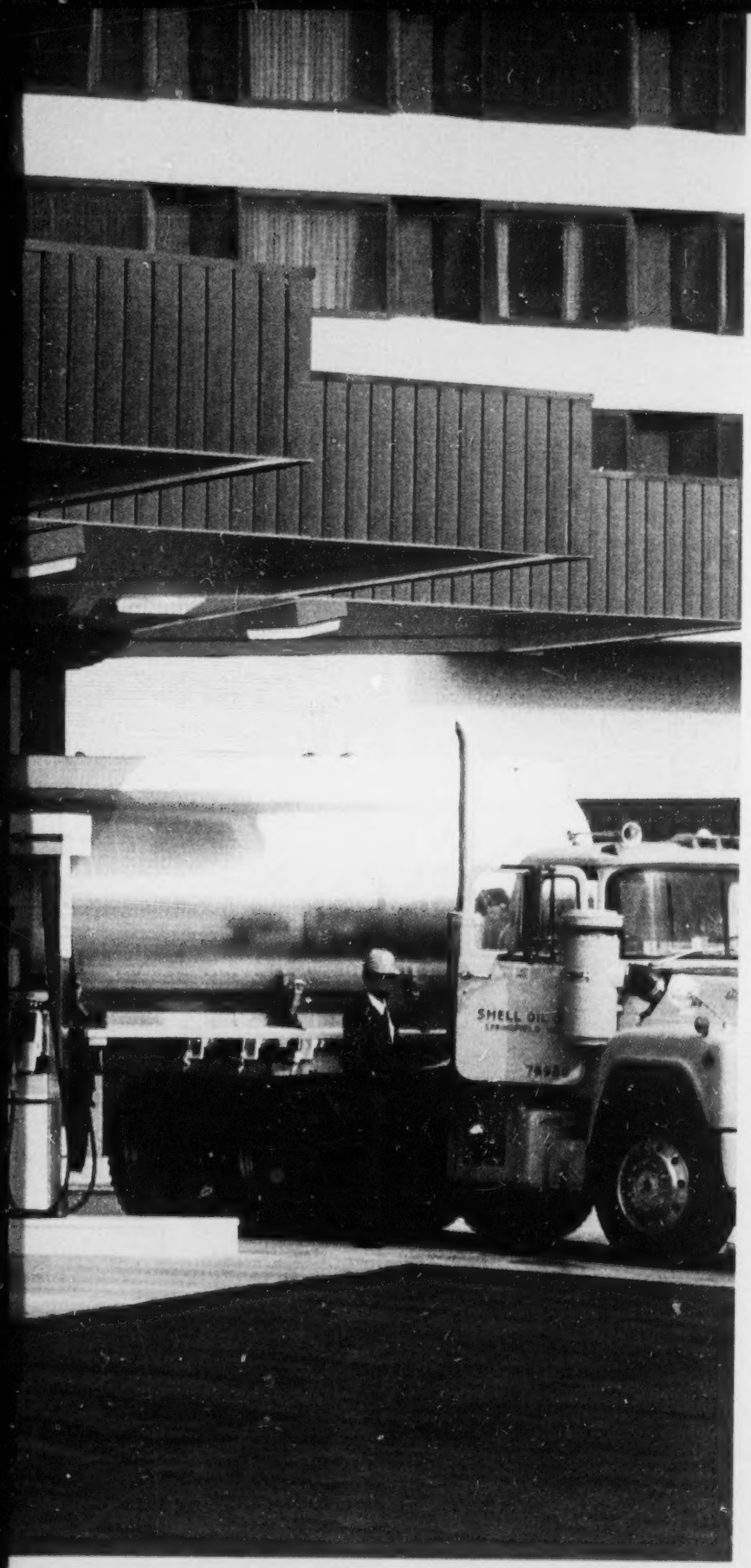
Page 4

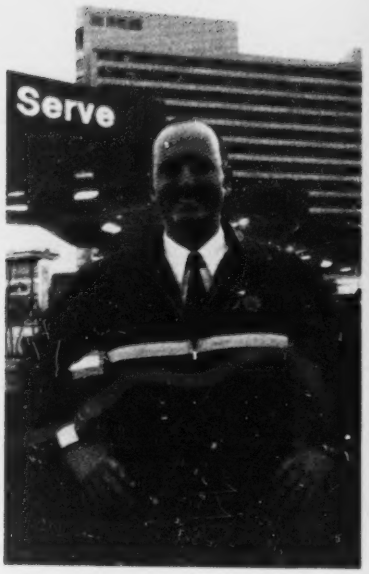
• Record Oil Products earnings that maintained our leading profitability position among our major competitors;

Page 3

Page 26

Excerpt from the Annual Report of Shell Oil Company, December 31, 1981





Tysons Corner Virginia

A key strategy in Oil Products is to remain one of the industry's most efficient marketers by relinquishing older, outmoded service stations and concentrating in those metropolitan areas where we have our greatest logistical and marketing strength. This new high-volume station in Tysons Corner, just outside Washington, D.C., is a part of this strategy. Shell dealers also continue to provide service and guaranteed repair work at the many stations offering AUTO CARE.

Page 27

—Oil Products earnings were up again in 1981, even with lower automobile gasoline sales at Shell, and throughout the industry.

Page 36

Oil Products

Oil Products segment earnings were $360 million, up 13 percent from the 1980 level of $320 million, and exceeding the 1979 level of $256 million by 41 percent. Funds from operations in 1981 were $520 million, an increase of 14 percent over 1980, and 32 percent as compared to 1979.

In 1981, increased selling prices and improved refinery yields essentially offset the negative impact of lower sales volumes, and increased raw material and other variable operating costs. Earnings growth benefited from higher investment tax credits largely associated with our refinery modernization program in California.

The year 1981 began unfavorably as competitive market conditions inhibited recovery of rising crude oil costs. Although industry oversupply conditions persisted, Shell's margins (chiefly sales revenue less raw material and refinery fuel costs) began an upward trend in the second quarter because of successful crude oil acquisition strategies and steps taken to improve operating efficiency.

Page 37

During 1981, Shell continued modernizing and consolidating its retail service station network. This effort will be continued over the foreseeable future to assure Shell's position as one of the most efficient and profitable downstream marketers.

Auto gasoline sales decline — Estimates show that 1981 U.S. industry demand for automotive gasoline has fallen 10 percent from 1979. Shell maintained a leading position in the marketplace despite a somewhat higher sales drop of 12 percent over the two-year period. Automotive gasoline continued to represent a large percentage of our total refined product sales volumes, reaching 57 percent for both 1980 and 1981 from 52 percent in 1979.

Sales of jet fuels were down from 1980 because of strategic market withdrawals, greater airline fuel efficiency, the impact of the air traffic controllers' walkout, and reduced air travel generally. Lubricant sales were also down, reflecting the general economic slowdown.

Following the removal of crude oil and gasoline price controls in early 1981, gasoline prices initially moved up but then fell as supplies increased and demand slackened. Competitive pressures on selling prices, which intensified late in the fourth quarter, have been narrowing margins, a condition that may persist well into 1982.

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Products (Continued)

Gasoline— Shell's market share was down somewhat in 1981 after increasing in 1980. Margins remained favorable due primarily to cost control.

The federal government's seven-year-old price and allocation controls on both gasoline and crude oil were removed simultaneously early in the year. In contrast to the predictions of many industry critics, gasoline prices didn't soar following decontrol. They did move up initially — primarily due to higher foreign crude oil costs — but then fell as supplies increased and demand slackened. Shell's wholesale prices averaged $1.10 per gallon in 1981, up from 97 cents per gallon in 1980.

Though demand was down, Shell maintained a leading position in the marketplace. This reflected the strength of both our direct dealer network, concentrated primarily in major metropolitan areas, and the Shell branded jobber network that markets in smaller cities and rural areas. Our overall gasoline sales declined 11 percent from 1980 levels. Sales through Shell branded jobbers — which account for about one-third of our total volume — declined somewhat less.

Unleaded gasoline continued to increase its share, accounting for 56 percent of Shell's total gasoline sales in 1981 versus 50 percent in 1980.

Continued success was achieved in the program to consolidate the Company's retail service station network and convert more stations to self-service.

During 1981, we relinquished 600 stations, bringing the total to 2,800 since 1976. The objective is to make sure Shell remains one of the most efficient and profitable marketers by relinquishing older, outmoded stations directly owned or leased by Shell and increasing the average amount of gasoline sold per station.

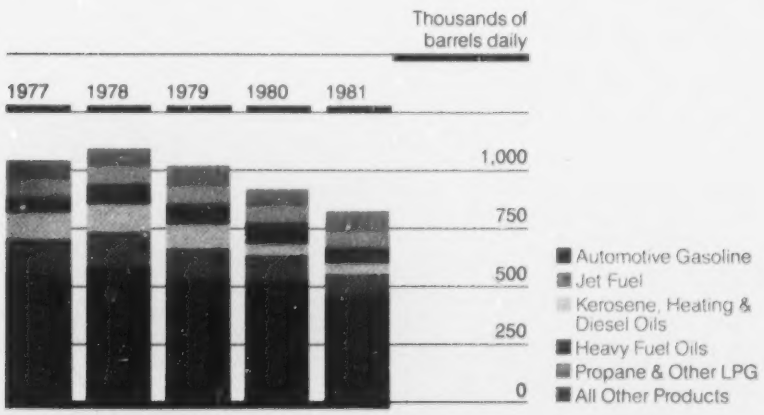
At the same time, the AUTO CARE program remained an important part of our marketing strategies, with more than 1,900 stations participating. Under this program, participating Shell dealers agree to guarantee car repairs by their own certified mechanics, providing customers with improved qualified car repair service. This program helps bring more customers into Shell stations, giving dealers another valuable marketing tool.

Legislative proposals to restrict petroleum marketing practices continued to receive attention at both the federal and state levels. Some of these proposals would ban large refiners such as Shell from operating service stations with salaried employees and could encourage widespread misbranding by dealers. Shell is very concerned about the prospect of misbranding. We believe it could lead to consumer deception, mistake or confusion. It could also violate Shell's trademark rights and its ability to maintain a branded service station network, which is an important part of our business. We are also concerned about legislative proposals to ban salary operated stations. We believe these proposals are discriminatory because they would apply to only a few refiners like Shell. This restriction would deny Shell, and thus consumers, the competitive benefits from such operations.

Page 24

Automotive gasoline accounts for more than half of total refined products sales, with jet fuel our second largest product line.

Page 21



STANDARD OIL OF INDIANA (AMOCO)

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 27,831,862,000	$ 31,729,171,000
Earnings	1,915,314,000	1,921,800,000
Number of Employees	56,401	58,665
Return on Average Shareholder's Equity	21.6%	19.2%
United States Motor Gasoline Sales as a Percentage of Amoco Worldwide Sales (by Barrels)	43.2%	46.8%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	1	3
On Shore Oil Rigs	–	2
Refineries	1	1
U.S. Gasoline Pumps	None	1
Gasoline Station Employees	None	None
Coal Mines	None	1
Corporate Citizenship	1	None
Research	–	1
Background of Chief Executive	Chemical Engineering	Chemical Engineering
Percentage of Company Stock Owned by Corporate Officers and Directors	59/100th of 1%	65/100th of 1%
Number of Pages in Annual Report	56	53
Number of Pages Devoted to Gasoline Marketing	1-1/2	2

Number of Amoco Gasoline Stations in the United States:

12-31-81	20,100
12-31-80	21,300
12-31-79	21,500
12-31-76	24,800
12-31-71	N/A

Marketing of Petroleum Products

In the United States, Standard's marketing of petroleum products is concentrated in the Midwest, East, and Southeast. It supplies a total of about 20,100 retail outlets, of which 5,800 are either owned or leased. Except for a few outlets, all are operated by independent dealers. Many of Standard's service stations have self-service and mini-service islands which are being patronized by an increasing number of motorists. Most outlets offer two grades of lead free gasoline, in addition to leaded regular gasoline.

Excerpt from 10K, page 8

United States Refining, Marketing, and Transportation
United States downstream operations incurred a loss of $140 million in 1981 contrasted with earnings of $32 million in 1980 and $12 million in 1979.

The severely depressed level of earnings in 1981 reflected the company's inability to recover higher raw material and operating costs in the marketplace, particularly in the first quarter of the year. Operations were also adversely affected by sluggish economic conditions and decreased product demand. Sales volumes of refined products declined 13 per cent from the prior-year level. As a consequence, the company's refineries operated at less than 70 per cent of capacity in 1981 and the company elected to mothball its Wood River refinery with a crude running capacity of 104,000 barrels per day. Results for 1981 included charges of $23 million associated with the refinery shutdown.

Page 26

We had an especially difficult year in 1981 in our refining and marketing business where generous supplies prevented timely recovery of increased crude oil costs. We are taking steps to reduce expenses in both our refining and marketing operations and expect to see positive results in 1982.

Page 3

What the Standard Oil (Indiana) Annual Report Says About Gasoline Marketing:

Amoco Oil Company branded reseller/jobber marketing area

until 1971
until Oct. 1, 1982
after Oct. 1, 1982

We began a four-year image-enhancement program at our service stations in 1981, using new colors and graphics. We also added more self-service pumper stations to our system, reflecting customers' buying patterns.

Page 15

Excerpt from the Annual Report of Standard Oil Company (Indiana), December 31, 1981

Marketing, Manufacturing, and Transportation

Our worldwide refined petroleum products sales declined 13 per cent in 1981, to an average of 1,014,000 barrels per day, compared with 1,168,000 barrels a day in 1980. Refinery runs averaged 944,000 barrels per day in 1981, down 9 per cent. The decline in demand for petroleum products was due to the recession and price-induced conservation.

We incurred large losses in the first quarter when competitive market conditions in our domestic and foreign downstream operations would not permit prompt recovery of sharply higher crude oil costs. A worldwide industry surplus of crude oil, refining capacity, and product inventories depressed earnings for the balance of 1981.

We are responding to these conditions by increasing our capacity to produce more high-value products and by tailoring our operations to current and expected sales levels.

United States

(Millions of dollars)	**1981**	1980
Capital expenditures	**$ 473**	$ 370
Identifiable assets	**3,878**	4,016
Segment revenues	**19,876**	17,828
Net income	**(140)**	32
Net income as a % of:		
Identifiable assets	**(–)**	0.8%
Segment revenues	**(–)**	0.2%

Marketing: Decontrol of domestic crude oil and petroleum product prices early in 1981 eliminated large entitlements payments to our competitors, which we had been required to make since 1974. It also allowed Amoco to resume reshaping its marketing operations to improve profitability and respond to customers' needs.

We announced in November that we will withdraw from branded dealer and jobber sales of gasoline and distillates in 11 states (see map) by Oct. 1, 1982, due to low volume, poor profitability, and high costs. Excepted are the metropolitan areas of Houston, and Louisville and Lexington, Ky. Sales will continue to commercial and industrial consumers in the 11 states.

We consolidated our marketing activities into three regions, reducing costs without sacrificing customer service.

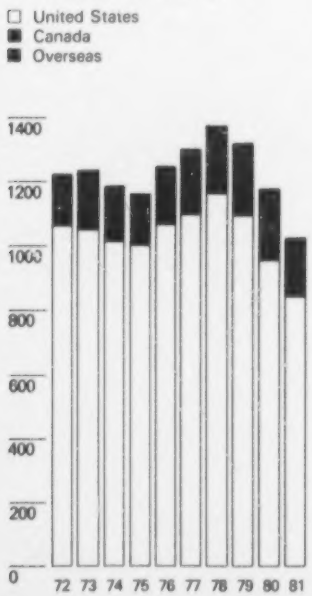
To better respond to motorists' buying patterns, we continued to add new high-volume self-service pumper stations to our system, to complement our conventional full-service facilities.

New colors and graphics have been adopted for a four-year image-enhancement program to provide a modern, uniform appearance for our company-owned stations, and many jobber stations. The upgrading program began in five metropolitan markets in 1981.

Amoco Oil continued to be the leading seller of lead-free gasolines in its marketing area in 1981, with 9.9 per cent market share. At year end, Amoco ranked second nationwide in motorist gasoline sales with 7.7 per cent share.

Page 14

Refined Product Sales
in thousands of barrels daily



TEXACO, INC.

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 52,484,640,000	$ 59,297,000,000
Earnings	2,642,542,000	2,310,000,000
Number of Employees	66,745	67,000
Return on Average Shareholder's Equity	21.1%	17.6%
United States Motor Gasoline Sales as a Percentage of Texaco Worldwide Sales (by Barrels)	19.7%	18.9%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	2	6
On Shore Oil Rigs	—	5
Refineries	1	7
U.S. Gasoline Pumps	2	1
Gasoline Station Employees	1	1
Coal Mines	None	None
Corporate Citizenship	1	2
Research	—	3
Background of Chief Executive	Chemical Engineering	Chemical Engineering
Percentage of Company Stock Owned by Corporate Officers and Directors	24/100th of 1%	27/100th of 1%
Number of Pages in Annual Report	92	69
Number of Pages Devoted to Gasoline Marketing	1	1/3 page

Number of Texaco Gasoline Stations in the United States:

12-31-81	21,000
12-31-80	24,000
12-31-79	28,000
12-31-76	N/A
12-31-71	32,000

Below: **At some 550 selected retail outlets throughout the country, Texaco introduced filtered *Diesel Chief* to meet the growing demand for a premium-quality automotive diesel fuel.**

investment service stations in preferred marketing areas.

Texaco U.S.A. intends to strengthen its credit card program by issuing a new credit card with a two-year expiration date to new and existing card holders in 1982.

In 1981, Texaco implemented a 3% processing charge for credit card invoices submitted by retailers and wholesalers. This charge was necessary to help offset sharply increased costs of the credit card system.

In 1982, Texaco U.S.A. will continue to consolidate marketing operations in such areas as the Northeast, Southeast, Southwest, and West Coast, while discontinuing uneconomical marketing operations in all or parts of 19 states in the Northern Rockies, Midwest, and certain Great Lakes areas.

Keeping pace with new trends in petroleum marketing, the Company's marketing strategy calls for serving Texaco customers with an efficient network of Texaco-branded retail outlets, including about 3,000 modern, high-volume,

MOBIL OIL CORPORATION

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 63,726,000,000	$ 68,587,000,000
Earnings	2,813,000,000	2,433,000,000
Number of Employees	212,800	206,400
Return on Average Shareholder's Equity	23.9%	17.6%
United States Motor Gasoline Sales as a Percentage of Mobil Worldwide Sales (by Barrels)	18.9%	16.9%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	3	1
On Shore Oil Rigs	–	None
Refineries	2	2
U.S. Gasoline Pumps	–	None
Gasoline Station Employees	None	None
Coal Mines	None	None
Corporate Citizenship	None	None
Research	–	None
Background of Chief Executive	Accounting	Accounting
Percentage of Company Stock Owned by Corporate Officers and Directors	39/100th of 1%	N/A
Number of Pages in Annual Report	63	53
Number of Pages Devoted to Gasoline Marketing	1/3	1/3

Number of Mobil Gasoline Stations in the United States:

12-31-81	16,564
12-31-80	17,425
12-31-79	17,749
12-31-76	N/A
12-31-71	N/A

Marketing

Mobil Oil's petroleum products are marketed extensively in the United States and in more than 100 other countries. It has approximately 35,500 retail dealer outlets, 47% of which are located in the United States. These products include automotive and aviation gasolines, motor oils and greases, industrial lubricants and greases, marine fuels, jet fuels, lubricants, fuel oil, diesel oil, kerosine, asphalts, naphthas, solvents, waxes, and liquefied petroleum gas. The principal brand names identifying Mobil Oil's products are "Mobil Unleaded," "Mobil Super Unleaded," "Mobil Regular," and "Mobil Premium" gasolines, "Mobiloil," "Mobilheat," "Mobilgrease," "Mobil 1," "Delvac 1," and "Mobil" industrial and marine lubricants and process products.

Excerpt from 10K, page I-8

minals and two lube oil blending plants were closed, with customer demands met by other supply points.

Further efficiencies in the U.S. and overseas were achieved by closing lower-volume, marginal service stations and expanding the availability of self-service in response to growing customer preference for the lower prices this brings.

Reducing outlets to improve efficiency

Retail outlets	Year-end 1981	Year-end 1980
U.S.	16,564	17,425
Foreign	18,948	19,576

Page 11

New marketing efficiencies

In a continuing effort to improve operations, Mobil consolidated a number of its U.S. marketing facilities in 1981. Several light-product distribution ter-

Page 11

Improving our edge in marketing and refining

In a year when markets were soft, Mobil took some important steps to consolidate and upgrade its marketing and refining system.

Page 11

Refinery upgrading and modernization give Mobil an advantage.

Earnings from crude oil and natural gas production were strong. Profits from U.S. marketing and refining operations were also somewhat higher in spite of the soft market. As the dollar stabilizes and European economic conditions improve, we hope to see increased profits from international marketing and refining earnings.

Page 2

GULF OIL CORPORATION

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 28,808,000,000	$ 30,461,000,000
Earnings	1,407,000,000	1,231,000,000
Number of Employees	58,900	58,500
Return on Average Shareholder's Equity	15.3%	12.5%
United States Motor Gasoline Sales as a Percentage of Gulf Worldwide Sales (by Barrels)	30.7%	33.5%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	2	4
On Shore Oil Rigs	—	6
Refineries	3	3
U.S. Gasoline Pumps	None	1 (cover)
Gasoline Station Employees	None	None
Coal Mines	None	2
Corporate Citizenship	None	None
Research	—	2
Background of Chief Executive	Chemical Engineering	Chemical Engineering
Percentage of Company Stock Owned by Corporate Officers and Directors	62/100th of 1%	56/100th of 1%
Number of Pages in Annual Report	60	61
Number of Pages Devoted to Gasoline Marketing	1	3

Number of Gulf Gasoline Stations in the United States:

12-31-81	15,277
12-31-80	16,055
12-31-79	17,182
12-31-76	N/A
12-31-71	N/A

Approximately 15,300 service stations carry the Company's products in the U.S. of which about 95 percent are operated by independent dealers or jobbers with the remaining 5 percent Company operated. These service stations, which are concentrated primarily in the eastern and southern areas of the U.S., represent about 7 percent of the total number of service stations in the U.S. No single competitor or small group of competitors dominates the U.S. retail gasoline market.

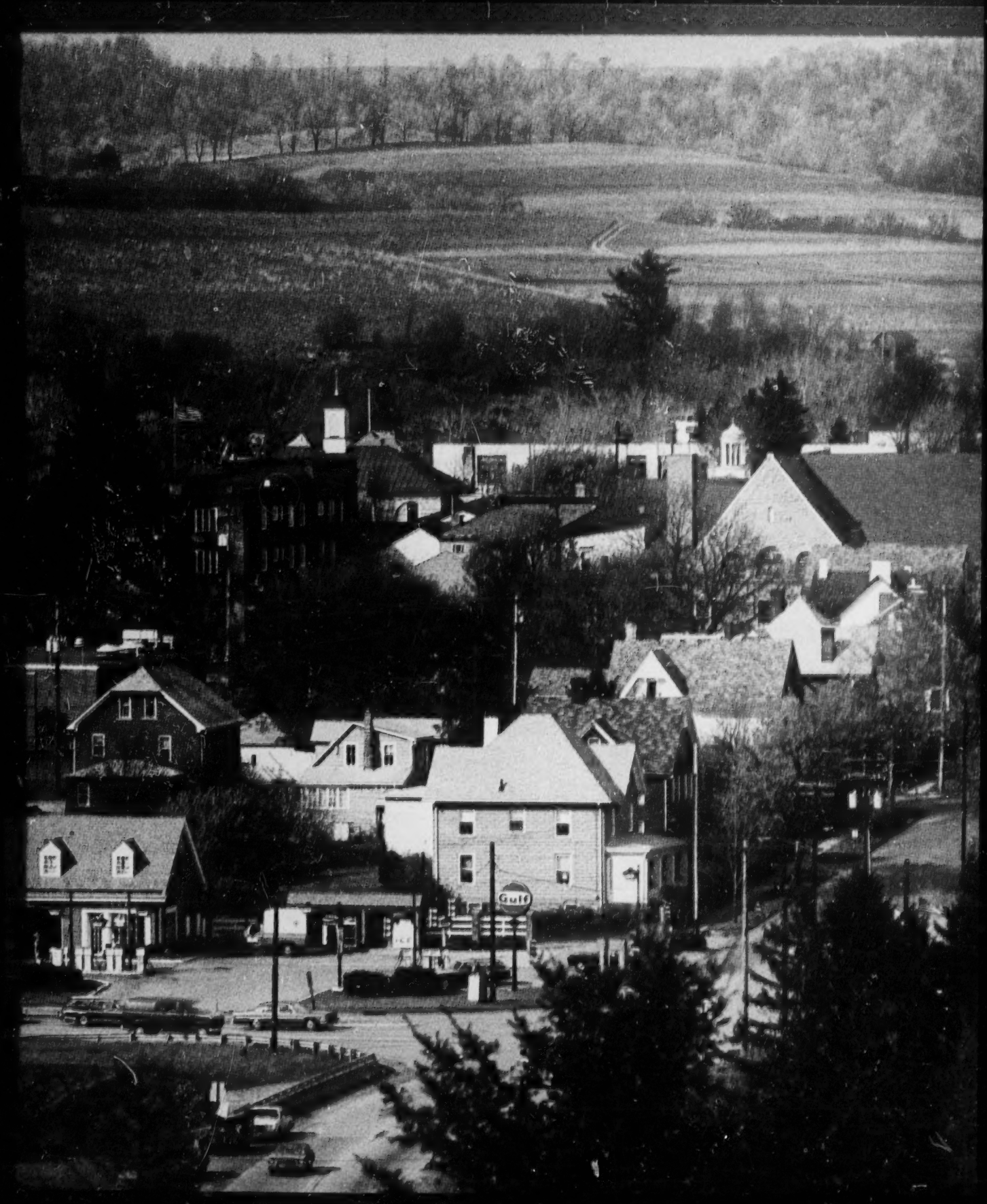
The Company has substantially completed the sale of its service stations located on the West Coast to an independent marketer as part of its program to eliminate its retail marketing activity in that area. The Company has a long-term contract to supply the independent marketer with refined products for these stations.

The Company has essentially completed a program to convert rural area distributors to branded jobbers. Distributors make deliveries to dealers and other customers on behalf of the Company. Jobbers resell refined products purchased from the Company. The conversion has resulted in a shift of approximately 28 percent of the Company's refined product sales from the retail and industrial and commercial markets to the jobber market.

Excerpt from 10K, Marketing, page 7

Gulf

Gulf Oil Corporation Annual Report 1981



Refining & Marketing

Gulf Refining and Marketing Company is targeting its growth toward the important transportation fuels market in the United States. During the 1980s, demand for these products is expected to grow as a percent of total petroleum usage, even though total petroleum demand declines. Transportation fuels also provide the greatest value added—and the greatest potential for profit.

1981 was a poor year for the U.S. refining and marketing industry. Gulf posted a loss of $48 million against operating earnings of $443 million a year earlier. For the second year in a row, the industry experienced reduced product demand brought on by the recession, increased conservation and fuel substitution. Decontrol of domestic crude oil prices in January increased feedstock costs at a time when consumer resistance to rising oil prices was mounting.

During the first eight months of the year, Gulf was particularly disadvantaged by its dependence on an uncompetitively priced foreign crude oil slate, primarily from Nigeria. When the higher costs could not be passed on at the gasoline pump, the Company was forced to reduce selling prices—and sustain operating losses—to maintain market share. In the final quarter of the year, excess world crude oil supplies and falling demand forced OPEC to realign prices, and Nigeria reduced the price of its oil to once again be competitive with the official prices of other crudes.

To prosper in today's vastly changed petroleum market, Gulf is pursuing a three-pronged strategy designed to: first, increase market share for gasoline and transportation distillates in key areas; second, permit the processing of more readily available sour crude oils; and third, sustain a refinery utilization rate higher than the industry as a whole. In addition, lower product demands and tighter controls are expected to permit sizable withdrawals of crude oil and product inventories in 1982, thereby reducing carrying costs and improving earnings and cash flow.

Marketing

Gulf, with an 8-percent share, is the second largest marketer of gasoline in a 28-state area in the East and South. This area encompasses 70 percent of the U.S. population and over 60 percent of the nation's petroleum demand.

Gulf has launched a major program to increase its market share in those areas where it already holds a competitive edge. Primarily, this will mean investing in the strong metropolitan areas where the Company has a good logistics base. Gulf intends to expand selectively where its competitors pull back, withdraw from areas of weakness, and serve its rural customers through an expanded jobber, or wholesale, network. ←Page 11

Retail operations are being upgraded through a major station rebuild and modernization program, including new pumps and color schemes. Brand loyalty is being reinforced by offering superior products, such as Gulf's high-octane Super Unleaded gasoline and Auto Diesel, which are gaining increased consumer recognition, and through renewed emphasis on dealer training and customer services.

declined at about the same rate. Distillate sales fell 14 percent as the Company withdrew from some marginal heating oil contracts in New England, but Gulf's 3-percent decline in gasoline sales was more moderate than the industry's 4.5-percent decline.

In Puerto Rico, where the Company has a 15-percent share of branded gasoline sales, volumes increased 12 percent despite an overall decline in the gasoline market.

Refining & Marketing* Financial Summary

	Millions of Dollars		
	1981	1980	1977
Revenues	$19,342	$18,711	$9,858
Operating (Loss) Profit	(1)	489	272
Total Assets	3,489	3,912	2,751
Capital Expenditures	419	396	159

Refining & Marketing* Operations Summary

	1981	1980	1977
Crude Oil Processed (thousand barrels per day)	836	1,002	1,244
U.S. Crude Imports (thousand barrels per day)	246	332	406
Refined Products Sold (thousand barrels per day)	888	954	1,177
Inventories (millions of barrels)			
Crude	37	39	35
Refined Products	60	72	72

*Includes the U.S. and European operations only

Page 12

Page 12

Although the energy-producing segments of our business achieved record earnings, the segments which are closest to the consumer—refining, marketing and chemicals—experienced operating losses in both the United States and Europe. Overall, Gulf's net income declined 12 percent from 1980's record level, to $1.2 billion, or $6.37 per share. Of greater concern, our return on shareholders' equity slipped to 12.5 percent from 15.3 percent.

Page 2

These achievements must be viewed against a rapidly changing world energy picture. In two short years, the petroleum industry has gone from a seller's market to a buyer's market. Shortages and spiraling prices have given way to surpluses and price cutting. This is not surprising considering the shock waves caused by two foreign-induced oil crises and more than a tenfold increase in oil prices during the 1970s. However, the duration of the current recession and the extent of consumer conservation and

Page 2

Cover

The Orange Disc and Gulf's quality service are a central part of historic Ligonier, Pennsylvania, in the rolling hills east of Pittsburgh. Gulf is the second largest marketer of gasoline in a 28-state area in the East and South. *(Photograph by Dennis Harding, Gulf)*

Page 1

To prosper in refining, marketing and chemicals today, operations must be streamlined, marketing skills enhanced and costs tightly controlled.

Page 3

A look at U.S. gasoline trends is illustrative. At the beginning of 1981, Gulf's average wholesale price was $1 a gallon. Despite an increase in oil prices by the Organization of Petroleum Exporting Countries (OPEC) in early January and decontrol of domestic crude oil prices at the end of that month, Gulf and other refiners were unable to pass on all of these higher costs at the gasoline pump. After falling steadily since 1978, industry gasoline sales dropped another 4.5 percent in 1981 and competition was intense. To maintain market share, we were forced to reduce prices—by a total of 15 cents a gallon since March 1981. As of the date of this letter, 13 months after decontrol, Gulf's average wholesale price was again just under $1 a gallon.

The laws of economics have also worked in the broader arena of international oil prices. While free-world oil demand declined 10 percent between 1979 and 1981, OPEC production fell by 26 percent. The cutbacks were most severe in those countries, such as Nigeria, that had maintained the highest prices. Faced with falling revenues, OPEC realigned prices in October. In early 1982, however, these "official" prices were again coming under pressure as North Sea producers, Iran, Mexico and others shaved prices to maintain sales volumes. U.S. oil prices have been reduced by $4 to $5 a barrel since early 1981.

Petroleum demand is expected to continue to decline in 1982. Only a substantial improvement in the economy coupled with low oil prices is likely to produce any growth in demand over the next several years. Barring a major disruption in supplies or an enforceable agreement by OPEC to limit oil production, the next few years could be characterized by excess world producing capability, surplus refining and marketing capacity and increasing competitive pressures throughout the industry.

Page 2

United States

In the U.S., 1981 net income of $653 million was nearly $100 million lower than in 1980 and about $80 million below 1979. Still, U.S. net income amounted to more than 50 percent of total earnings in each year.

Operating earnings (before income taxes and corporate items) of $1.4 billion in 1981 from petroleum exploration and production were some $250 million higher than in 1980, and nearly double 1979's earnings of $784 million.

The principal factors were higher crude oil and natural gas prices. Phased decontrol of oil prices began in mid-1979, and all price controls were removed in January 1981. As a result, Gulf's crude oil prices averaged just over $34.50 a barrel last year, compared with $21 and $12 in the two prior years. However, the crude oil excise tax took $11 a barrel in 1981 and $3.25 in 1980. Under the escalation provision of the Natural Gas Policy Act, Gulf's average gas prices rose to $1.54 per thousand cubic feet from 83 cents two years earlier. Earnings were penalized throughout the period by the sale of approximately one-third of the Company's natural gas deliveries at low contract prices to Texas Eastern Transmission.

Higher prices more than offset continued declines in production. The Company's net production of crude oil and natural gas liquids averaged 345,400 barrels per day in 1981, which was 5 percent below 1980's level and 10 percent below 1979. Natural gas production slipped to 1.7 billion cubic feet per day in 1981 from 1.9 billion in 1979, a two-year decline of 11 percent. Much of this was market-related as major customers reduced their demand. Average deliveries of 565 million cubic feet per day requested by Texas Eastern were 23 percent below 1979.

Warren Petroleum Company, Gulf's natural gas liquids division, has been a major profit contributor accounting for more than 15 percent of U.S. exploration and production operating earnings over the period. Higher sales volumes, better margins and inventory gains benefited 1981.

U.S. refining and marketing operations lost $48 million in 1981 as a large first-quarter loss, resulting from the Company's uncompetitively high-cost crude oil slate, could not be recouped through improved profitability in subsequent quarters. In 1980, operating profits of $443 million included a pretax gain of $106 million from LIFO inventory liquidations, while 1979 profits were $354 million.

Refined product sales peaked in 1979 at 913,500 barrels per day. But in 1980, when Gulf's attempt to pass on its higher crude cost was met by consumer resistance, sales dropped 19 percent. Even with more competitive pricing in 1981, volumes fell another 6 percent to 691,000 barrels per day. However, gasoline volumes, which were off by 21 percent in 1980, declined only an additional 3 percent in 1981.

ATLANTIC RICHFIELD COMPANY (ARCO)
YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 24,156,000,000	$ 28,208,000,000
Earnings	1,651,000,000	1,671,000,000
Number of Employees	53,400	54,200
Return on Average Shareholder's Equity	24.4%	20.8%
United States Motor Gasoline Sales as a Percentage of ARCO Worldwide Sales (by Barrels)	41.8%	40.2%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	1	2
On Shore Oil Rigs	--	1
Refineries	1	1
U.S. Gasoline Pumps	1	1
Gasoline Station Employees	None	None
Coal Mines	None	2
Corporate Citizenship	1	2
Research	–	1
Background of Chief Executive	Finance	Finance
Percentage of Company Stock Owned by Corporate Officers and Directors	46/100th of 1%	46/100th of 1%
Number of Pages in Annual Report	60	61
Number of Pages Devoted to Gasoline Marketing	½	4

Number of ARCO Gasoline Stations in the United States:

12-31-81	7,122
12-31-80	8,200
12-31-79	8,300
12-31-76	N/A
12-31-71	N/A

What the Atlantic Richfield Annual Report Says About Gasoline Marketing:

As the industry enters a period of transition, Atlantic Richfield is in excellent shape to operate in the changing environment.

Success in business is a mix of many things: organization, planning, persistence and agile response to changing circumstance.

All these factors contributed to the remarkable growth that Atlantic Richfield experienced during the past 10 years. Timing, above all, has been crucial. A 10-fold increase in the price of crude oil has buoyed the entire petroleum industry, with Atlantic Richfield rising more quickly than most on the strength of our Prudhoe Bay discovery.

But the world moves fast, and the situation we face today is different and, in its way, more challenging to the skill and enterprise of the managers of this Company.

Changes that have occurred over the past two years, and particularly during 1981, have been dramatic, with most of the impact linked to the amazing effects of U.S. crude oil decontrol. In the process, we've all become reacquainted with "elasticity," an economist's term for the responsiveness of a commodity like oil to changes in price.

During control, many assumed that U.S. demand would remain high even if prices rose dramatically and, on the other side of the coin, that higher prices would not stimulate significant new domestic supply. The common wisdom held that there were virtually no petroleum prospects left to develop in this country.

But even the most durable skeptics must be convinced by now that demand for petroleum products *does* respond to price changes and so, in the longer term, will supply.

Demand in this country has dropped 13 percent since 1979, with Americans cutting their oil use by more than a million barrels a day in 1981 alone. The same trend is markedly in evidence in all the industrialized countries of the Western world.

Three factors, broadly speaking, have been at work: first, the basic reluctance most people feel to pay higher prices and the ensuing effort to use petroleum products in a more efficient, less consumptive way; second, the widespread drawdown of crude and product inventories throughout the year; third, the constraining effect of the recession in most industrial countries, including the United States.

In some respects, these effects are passing. Inventories cannot be depleted beyond a certain point, and worldwide economic activity is expected to strengthen during 1982 and possibly for the balance of the decade. Both developments should revive demand for energy, particularly oil.

The impact of decontrol on domestic oil production is less dramatic than on demand, but no less certain.

Total domestic crude oil production dropped by only 25,000 barrels a day in 1981, the smallest decline in a decade. And all signs indicate that massive investment by the domestic industry — up from $29 billion in 1978 to more than $70 billion last year — will enable the country to continue its efforts to reassert control over its energy situation. Imports of crude oil have dropped about one-third since 1979, and are about 500,000 barrels a day *below* imports in 1973, the year of the first great oil shock — the OPEC embargo — although at over five million barrels a day, they still represent an important dependence.

The view ahead seems to indicate no significant shortages of petroleum in the foreseeable future, nor another spiraling price rise of the sort experienced in 1979 after the Iranian revolution, unless there is a major interruption of supplies from one or more of the major oil producing nations.

For the country, then, the prospect is improved — a time of adequate energy supplies, a time in which to work out our energy strategies for the future in reasoned calm. The contrast with the chaotic and threatening conditions that prevailed during the 1970s is considerable.

For Atlantic Richfield Company, this is a time when we will look increasingly to our most valuable resources — imagination, creativity and a tough-minded commitment to our enterprise.

In an atmosphere of newly restored market freedom and stiff price competition, Atlantic Richfield finds itself with room to run. As for which direction to go, the answer is probably to be found by the application of still another desirable business trait: flexibility. The capacity to adjust planning strategies in an evolutionary or, if needed, a revolutionary way, is indispensable in the emerging environment.

Our answer, reflecting more evolution than revolution, is contained in the charts on the right. They draw a comparison between the Company's capital deployment at the end of 1981 and the situation as we project it at the close of our present five-year plan in 1986.

Two conclusions are immediately obvious.

First, this Company will continue to grow at a very substantial rate for the next five years. By 1986, our employed capital is expected to have doubled from $17 billion to $34 billion.

Second, by the end of our current five-year capi-

BEST AVAILABLE COPY

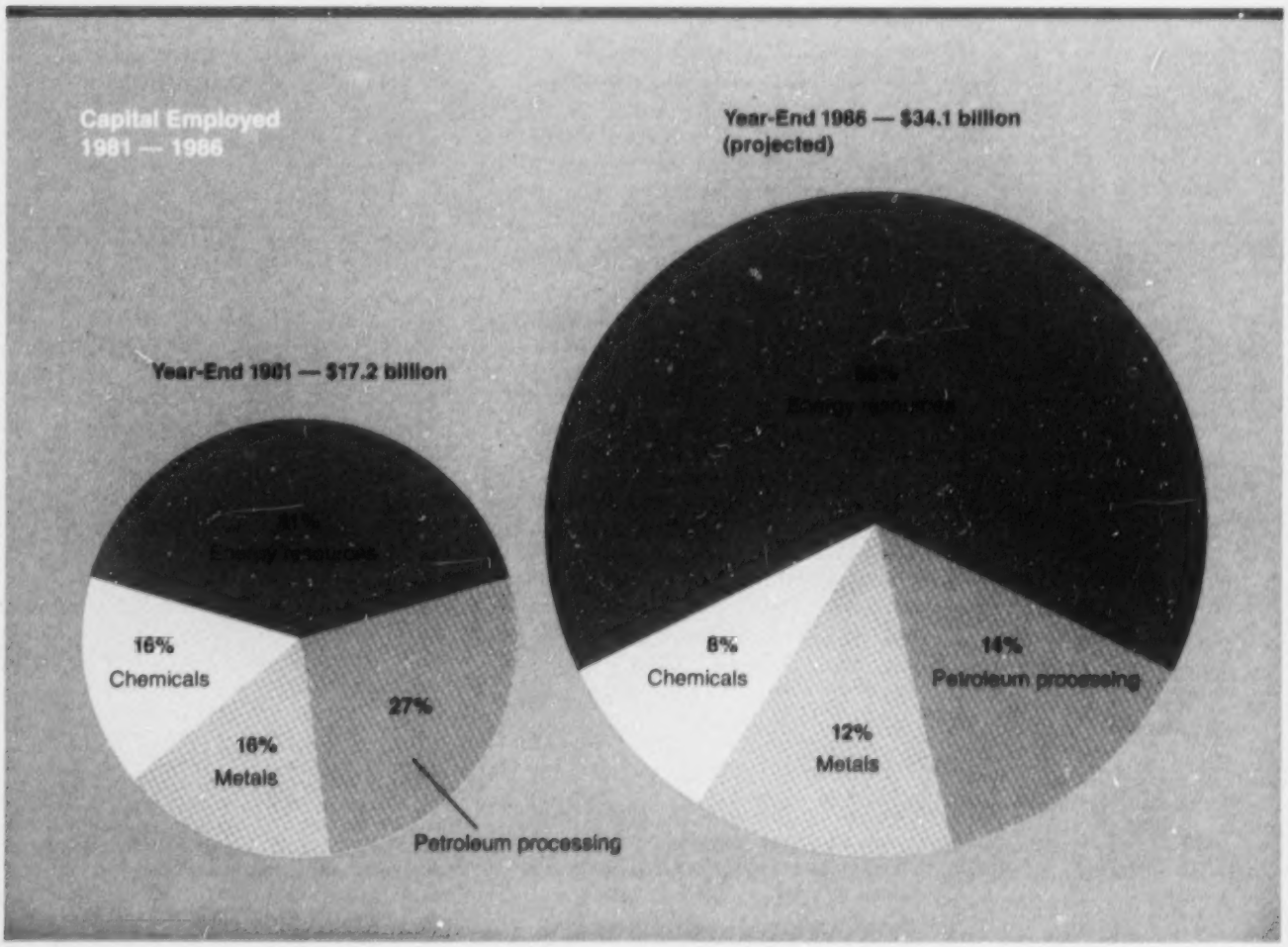
The Company's plans put heavy emphasis on oil and gas, an area where opportunities are substantial.

tal plan, Atlantic Richfield's assets and operations will be far more concentrated in the integrated petroleum business than we had visualized back in the mid-1970s, when our view of the future seemed to dictate the need for greater diversification. Decontrol has influenced our perception by providing new opportunities in our basic oil and gas operations. Returns on investment and risks are now at reasonable levels, thereby reducing the intense pressure we felt to rapidly broaden the base of the Company into unregulated areas.

Thus, we have designed an aggressive $27 billion five-year plan with nearly 90 percent devoted to finding, developing and processing energy, largely in the United States. The remaining funds will be invested in promising opportunities in metals and chemicals, our chief diversifications. We are confident that this capital program can and will be funded while maintaining the Company's strong financial position.

Increasing our capital concentration in the most profitable lines of business is the most responsible action we can take in today's environment. The Company's oil and gas operations have been highly successful and the opportunities we have to continue to expand our reserves are substantial and continuing.

The decision to enlarge our oil and gas commitment also reflects our belief that there will always be a strong demand for American-produced energy, particularly in view of the country's continued heavy dependence on foreign sources of oil. Moreover, the Company is positioned to benefit disproportionately from the kind of tough, competitive market we are experiencing today. Even through periods of product price regulation, product shortages and then sharply rising prices, Atlantic Richfield's strategies have always been aimed at maximum efficiency and competitiveness in a wide range of environments.



Page 5

Atlantic Richfield's strategies for growth in this changing world focus on managing its assets for early bottom-line impact, emphasizing oil and gas and positioning its other operations for improvement opportunities.

All facets of the Company reflect this policy — from our production activities in Alaska and the Lower 48, to our transportation network, state-of-the-art chemical and aluminum plants, modern refining system and lean, efficient marketing network.

Over the past 10 years, for example, we have reduced marketing's geographic spread by withdrawing from weaker territories. In retained areas, we have emphasized strong, high-volume outlets tied to innovative marketing techniques like the am/pm convenience store program. As a result, Atlantic Richfield's lessee dealers have lifted their average volume from the bottom of the industry in 1972 to the top today.

The redesign of our capital program will be felt over the next five years in our non-oil and gas activities. Approximately 30 percent of our assets are now committed to minerals, metals and chemicals. This share will be allowed to drop to about 20 percent by the close of the plan period. In dollar terms, the diversification areas of the Company will continue to grow, but at a slower rate relative to our other interests as we tightly focus diversification on our most exciting prospects.

Some have raised the possibility that substantially lower prices might inhibit oil opportunities. If this were to happen, our metals and chemicals businesses could be expected to show a significantly improved performance. While these diversifications were chosen for the business opportunities they present, they also effectively hedge our portfolio.

In other areas, we are also paying close attention to factors vital to the Company's future, notably the technological proficiency of today's operations, and emerging technologies that could be important in years hence.

Our research and development capabilities have been significantly strengthened in recent years. Computerized interpretation of seismic data at our oil and gas laboratory in Plano, Texas, is state-of-the-art in the industry.

The Chemical Company's new research and development center in Newtown Square, Pa., was opened early in 1981 and a decision was made to concentrate the metal fabricating research efforts of Anaconda Aluminum and Anaconda Industries at a new facility in Arlington Heights, Ill. Experimental work will be done at this location on new metal alloys and composites. Developments in the downstream end of the petroleum business are handled at the Products Company's laboratory in Harvey, Ill.

A principal objective is to facilitate exchanges of scientific information and expertise between the corporation's operating companies through our newly established Office of Technology Coordination.

To assist our technical staff in addressing these concerns, an ARCO Science Advisory Council of distinguished scientists has been created. The Council advises Company scientists and management on emerging technologies that might create opportunity for the Company and its customers in the future.

Indeed, while this Annual Report is about what happened in 1981, it offers, as well, a strong indication of what this Company will be like in the late 80s, 90s, and the year 2000. Our intention is to manage our assets for early bottom-line impact, to emphasize oil and gas as our major activity and to position our other investments for continuing improvement.

We believe that these plans will lead to continued future success for Atlantic Richfield. Our commitment is to the fulfillment of that goal.

Exploration and production efforts in offshore areas are providing Atlantic Richfield with a significant source of natural gas production and increasing opportunities for crude oil reserves. The Company has major offshore programs in the Gulf of Mexico (shown here at Mississippi Canyon Block 148), in Indonesia's Java Sea, in the North Sea, offshore Southern California and in waters surrounding Alaska.

By restructuring refinery capacity, Atlantic Richfield ran its refineries at 92 percent of operable capacity in 1981. Ability to handle sour crude was also at a high level.

Refining and Marketing Industry Overview

Competition intensified in the petroleum refining and marketing arena in 1981. Price-induced conservation, fuel substitution, more fuel-efficient cars and the economic recession combined during the year to decrease U.S. consumption of gasoline by 4 percent (to 6.6 million barrels per day), distillate fuel by 5 percent (to 2.8 million barrels per day) and residual fuel by 20 percent (to 2 million barrels per day).

This declining trend resulted in substantial excess refining capacity throughout the industry, with refinery utilization rates falling to nearly 65 percent at year end. During 1981, operators were "mothballing" many inefficient processing units and in some cases whole refineries were being shut down. Despite these moves, remaining operable capacity was in excess of demand and runs at reduced rates still produced excess supplies. As a result, prices declined over much of the year.

ARCO Petroleum Products Company ◆

ARCO Petroleum Products Company has already addressed many of the issues now facing refiners and marketers and is in a strong position to operate successfully in this new environment.

The Company increased its share of the retail gasoline market in 1981 and upgraded refinery product output with lower yields of residual fuel oil. Pretax profit for ARCO Petroleum Products Company rose to $601 million in 1981, versus $456 million in the prior year. Results for 1981 were favorably affected by approximately $150 million, representing the combined pretax effect of reduction in inventories and provisions for other nonrecurring items.

During 1981, ARCO Petroleum Products Company restructured its refinery output, reducing crude capacity from an average of 826,000 barrels per day in 1980 to a year-end level of 629,000 barrels, by shutting down older, less efficient crude topping capacity. This move places the Company essentially in balance with proprietary crude production, fulfilling a long-standing goal and freeing the Company from the uncertainties of the spot crude market and unstable foreign sources.

Marketing

During 1981, ARCO Petroleum Products Company announced withdrawal from branded marketing activities in most of the Midwest. The Company's marketing operations are now concentrated near large population centers in the Northeast, Mid-Atlantic and the West. Presently, the Company has no further plans to withdraw from current marketing territories, but will continue to review opportunities to grow or divest as conditions warrant.

The average gasoline throughput in the Com-

Atlantic Richfield has found that ancillary business improves utilization of retail properties. The am/pm mini market concept has expanded to more than 600 units.

pany's lessee-dealer stations is currently more than 30 percent higher than the average of the fifteen major companies in the industry.

The Products Company's am/pm mini market franchise program continues to boost returns from the Company's service station properties. This marketing concept converts regular service stations into convenience food stores with gasoline, resulting in increased efficiency and profitability. The introduction of the franchise approach to this program in 1980 has resulted in dramatic increases in food sales. Annual unit food sales for the standard am/pm mini markets increased by 18 percent in 1981 over 1980 average sales. There were 685 am/pm mini markets at the end of 1981, and the Company plans to expand the program to 1,100 units by 1985.

Signs are readied for the growing number of am/pm mini markets, many of which are open for gasoline and grocery purchases 24 hours a day.

The Company continues to develop other innovative marketing concepts, such as the Award Tune-Up program, which offers computer diagnosed tune-ups. Introduced in 1981, this program is designed to further increase the efficiency of the Company's retail marketing outlets in the increasingly competitive marketing environment. Plans now call for 500 of these systems to be in place by 1985.

ARCC Petroleum Products Company ◇

Principal Strategies

• Maximize production of higher value products such as gasoline and distillates.

• Continue to improve crude processing flexibility to run additional amounts of lower cost sour crude.

• Boost productivity and returns on retail properties through innovative marketing concepts.

Page 16

Petroleum Products and Chemicals

Declining product demand and changing crude oil supplies are providing new challenges for the entire U.S. downstream petroleum industry — challenges that will require innovative management and new levels of efficiency.

Atlantic Richfield has already moved to meet these changes by upgrading its refineries, improving its marketing system and achieving a long sought after balance between refinery capacity and proprietary crude supply.

Page 16

• Declining demand for petroleum products, especially gasoline, resulting from price-induced conservation and economic conditions;

Page 31

From a high of 773,000 barrels per day in 1979, total domestic sales volumes of refined petroleum products fell in 1980 and again in 1981 as the public's continuing commitment to energy conservation and the nation's economic slowdown have led to declines in sales of gasoline, petroleum feedstocks to the chemical industry, and other refined products. Operating profit margins improved during 1979 and in the first six months of 1980, but then deteriorated through the first quarter of 1981.

Page 33

MARATHON OIL COMPANY

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 8,671,000,000	$ 9,733,500,000
Earnings	379,016,000	343,100,000
Number of Employees	15,247	N/A
Return on Average Shareholder's Equity	21.0%	16.6%
United States Motor Gasoline Sales as a Percentage of Marathon Worldwide Sales (by Barrels)	53.7%	50.9%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	5	No Pictures
On Shore Oil Rigs	—	Proxy Statement Only
Refineries	4	
U.S. Gasoline Pumps	2	
Gasoline Station Employees	2	
Coal Mines	None	
Corporate Citizenship	None	
Research	—	
Background of Chief Executive	Petroleum Engineer	Petroleum Engineer
Percentage of Company Stock Owned by Corporate Officers and Directors	8/10th of 1%	63/100th of 1%
Number of Pages in Annual Report	52	—
Number of Pages Devoted to Gasoline Marketing	2	½

Number of Marathon Gasoline Stations in the United States:

12-31-81	2,146
12-31-80	2,789
12-31-79	N/A
12-31-76	N/A
12-31-71	N/A

What the Marathon Proxy Statement Says About Gasoline Marketing:

Marketing

Marathon's domestic sales volume of refined products during 1981 totaled 7.0 billion gallons, a decrease of 1.6% from 1980. Gasoline volume was 3.7 billion gallons, down 2.2% from 1980. Middle distillate sales volume remained constant at 1.6 billion gallons in 1981 and 1980. Heavy fuel oil sales continued at the 1.3 billion gallon level for both years.

Wholesale distribution to private brand marketers and to large commercial and industrial consumers, primarily in the Midwest and Southeast, accounts for about 74% of Marathon's domestic marketing volume. Products include gasoline, middle distillates, propane, petrochemicals, heavy oils, asphalt and petroleum coke.

As of December 31, 1981, Marathon petroleum products were being distributed through 49 Marathon operated terminals, 357 Marathon brand bulk plants and 2,146 Marathon brand retail outlets. These retail outlets are located principally in the states of Ohio, Michigan, Illinois, Indiana and Kentucky. Most of Marathon-branded light petroleum products are sold to independent full-service dealers, distributors and jobbers. Marathon also sells home heating oil to domestic consumers; and motor oil, and lubricating oils to industrial consumers in addition to its dealers, jobbers and distributors.

Retail sales of gasoline and motor fuel are also made through limited service and self-service stations which are operated by a wholly-owned subsidiary under the brand names "Bonded," "Speedway," "Gastown," and "Consolidated." Subsidiary companies also operate bulk plants for the distribution of propane and distillates to residential heating and industrial consumers. As of December 31, 1981, these subsidiaries distributed products through 757 retail outlets and 33 bulk plants.

What the United States Steel Corporation Annual Report Says About Gasoline Marketing:

Marathon competes aggressively in all phases of the petroleum industry's operations from the initial exploration for crude oil and natural gas to the retail sales of refined products. The company is strongly based in the United States, with substantial foreign operations.

Marathon ranks in the top 40 U.S. industrial corporations when measured by sales*. With total assets of more than $5.6 billion, the company is owned by more than 39,000 shareholders and has more than 15,500 men and women employed in operations that extend to six continents.

Cover

This acquisition in no way lessens our dedication to continued modernization and upgrading of existing lines of business where such investment can earn a competitive rate of return. This dedication is evidenced by the $3.1 billion spent on our Steel segment for facilities in the six-year period, 1976-1981. Your management and the Directors are convinced that acquisition of Marathon Oil — an increasingly profitable producer, refiner, and marketer of petroleum products — will substantially benefit all of U. S. Steel's shareholders.

Page 2

Excerpt from the Annual Report of United States Steel Corporation, December 31, 1981

UNION OIL COMPANY

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 10,472,500,000	$ 11,296,200,000
Earnings	647,000,000	791,400,000
Number of Employees	17,995	19,399
Return on Average Shareholder's Equity	20.1%	20.8%
United States Motor Gasoline Sales as a Percentage of Union Worldwide Sales (by Barrels)	60.0%	59.6%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	3	3
On Shore Oil Rigs	–	1
Refineries	1	1
U.S. Gasoline Pumps	None	1
Gasoline Station Employees	None	None
Coal Mines	None	None
Corporate Citizenship	2	None
Research	–	1
Background of Chief Executive	Chemical Engineer	Chemical Engineer
Percentage of Company Stock Owned by Corporate Officers and Directors	62/100th of 1%	64/100th of 1%
Number of Pages in Annual Report	40	41
Number of Pages Devoted to Gasoline Marketing	¼	¾

Number of Union Gasoline Stations in the United States:

12-31-81	12,500
12-31-80	12,300
12-31-79	N/A
12-31-76	N/A
12-31-71	N/A

Domestic Petroleum Marketing

Union's products are distributed in 44 states under the "Union 76" trade name. Marketing was conducted through approximately 900 wholesale marketing and bulk distributing stations and approximately 12,500 service stations and other retail outlets at the end of 1981 including over 400 truckstops, most of which have both truck and passenger car service. Substantially all service stations and other retail outlets, including units owned and leased by Union, are operated by independent dealers. The wholesale marketing stations distribute products to the Company's retail outlets, sell to others for resale and sell directly to consumers. Through retail outlets, the Company also sells branded tires, batteries and other automobile accessories. Premium motor oils and greases are also marketed through wholesale distributors and to independent marketers throughout the U.S. and in many foreign countries.

Excerpt from 10K, page 7

What the Union Annual Report Says About Gasoline Marketing:

In marketing, Union remains committed to service to the customer. This means full service in a substantial number of service stations, full service Auto/TruckStops on the major transcontinental interstate highways, truck fueling stations at major truck centers and self-serve stations where they are required.

During 1981, Union introduced an unleaded premium gasoline in our eastern region. On the West Coast, Union is the only major marketer to retain a leaded premium gasoline to satisfy demand for this product. Leaded premium accounted for one-third of 1981 western region retail gasoline sales.

Nationally, we continue to expand for the growing diesel market. Nearly seven percent of our 12,500 retail outlets currently are selling diesel fuel.

As in 1980, higher raw material costs resulted in higher product prices last year. However, vigorous price competition kept margins thin, particularly in the first half of the year.

Total U.S. demand for petroleum products fell about five percent, the third straight year of decline. For Union, this translated to a refinery utilization rate of 76 percent, four percent less than the previous year, but above the U.S. industry average of about 70 percent. However, our cost effective fuel conversion facilities operated essentially at capacity.

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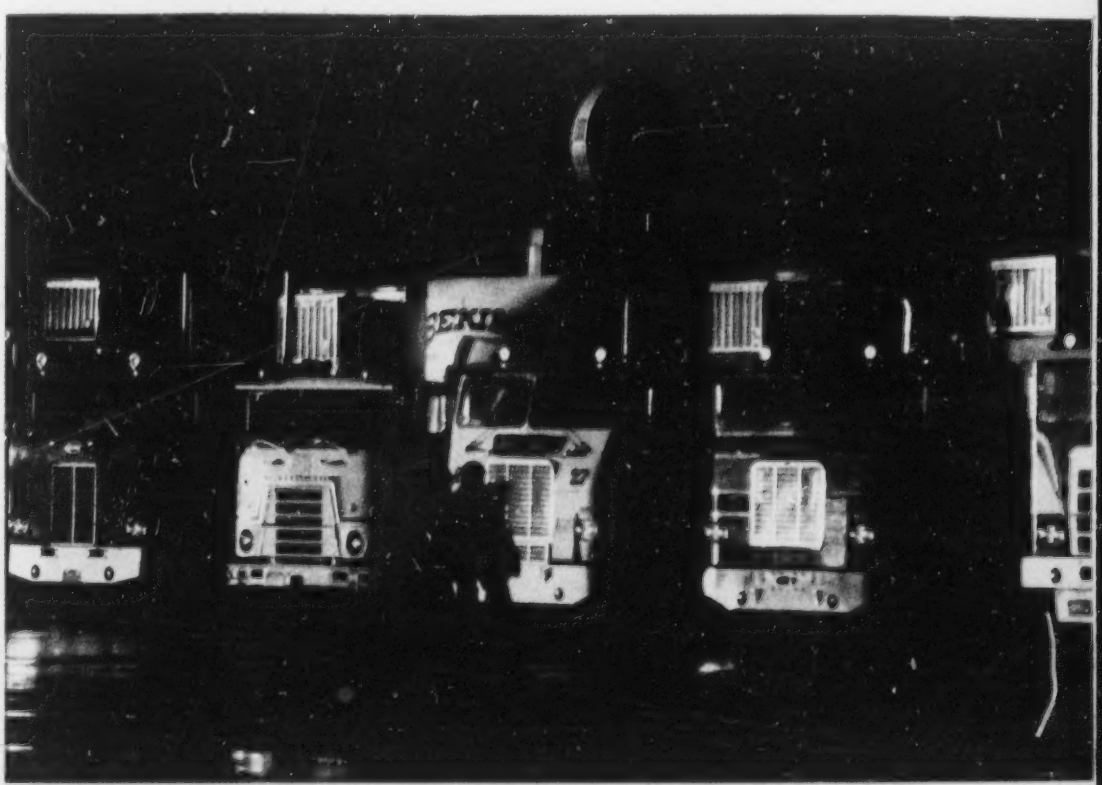
Union 76 Division

Improvements to refining, marketing and product transportation methods characterized the division's 1981 activities. These investments position the 76 Division to compete more successfully in 1982 and beyond.

Page 13

☐ Higher refined product sales—up $112 million (2%) as a result of higher sales prices. Product sales volume decreased 14%.

Page 18



A network of more than 140 Union 76 Auto/Truck-Stops crisscrosses the nation, offering full service fueling, restaurants, travel stores and 24-hour-a-day emergency road and tire service.

Page 14

DUPONT (CONOCO)

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 18,766,300,000	N/A
Earnings	1,026,200,000	N/A
Number of Employees	41,500	N/A
Return on Average Shareholder's Equity	24.5%	N/A
United States Motor Gasoline Sales as a Percentage of Conoco Worldwide Sales (by Barrels)	30.5%	30.0%

Annual Report Picture Survey:

Pictures of:	Conoco	Dupont
Off Shore Oil Rigs	3	2
On Shore Oil Rigs	—	1
Refineries	1	1
U.S. Gasoline Pumps	None	None
Gasoline Station Employees	None	None
Coal Mines	3	3
Corporate Citizenship	1	3
Research	—	—

Background of Chief Executive	N/A	N/A
Percentage of Company Stock Owned by Corporate Officers and Directors	29/100th of 1%	N/A
Number of Pages in Annual Report	60	124
Number of Pages Devoted to Gasoline Marketing	¼	1

Number of Conoco Gasoline Stations in the United States:

12-31-81	5,708
12-31-80	5,605
12-31-79	5,275
12-31-76	6,619
12-31-71	8,121

At December 31, 1981, Conoco's petroleum products were sold at over 7,700 worldwide retail outlets owned by Conoco and others.

Excerpt from Dupont 10K, Marketing, page 10

What the Dupont/Conoco Annual Report Says About Gasoline Marketing:

PETROLEUM REFINING, MARKETING AND TRANSPORTATION

Activities include supplying petroleum to the company's refineries and natural gas processing plants, and producing higher-value petroleum products for distribution and sale and for further processing in other company facilities.

Principal petroleum products include gasoline, jet fuel, diesel fuel, heating oil, fuel oil, asphalt, petroleum coke and natural gas liquids. These products are sold mainly in the United States and Western Europe. (Page 12)

Page 6

1981 WAS HIGHLIGHTED BY THE MERGER WITH CONOCO INC., MAJOR STEPS IN THE BIOLOGICAL SCIENCES, AND SIGNIFICANT IMPROVEMENT IN FINANCIAL PERFORMANCE.

It was a year of substantial accomplishment for Du Pont. The merger with Conoco Inc. provided diversification into energy and chemical feedstocks together with ownership of major oil, natural gas and coal reserves.

The acquisition of New England Nuclear Corporation, a leading manufacturer of radiochemicals and radiopharmaceuticals for medical diagnosis and research, and the start of major expansions of laboratories dedicated to life sciences were important additions to the company's thrust into rapidly growing markets for products based on medical and biological research.

Du Pont's financial performance showed improvement over the prior year. Total sales for 1981, including Conoco's sales during the last five months of the year, were $22.8 billion and income totaled $1,081 million. Earnings were $5.81 per share, 23 percent above the comparable 1980 figure. (Details of 1981 financial performance appear in the Financial Review and Analysis of Operations on pages 54-67 of this report.)

Page 2

Excerpt from the Annual Report of Dupont (Conoco), December 31, 1981

The company sells gasoline and other refined products at retail in 41 states, primarily under the "Conoco", "Kayo", "Fast Gas", "Fasgas", "Econo" and "Jet" brands. Conoco's marketing activities have benefited from a greater proportion

Page 12

of high-volume retail outlets than is typically found in the industry. In particular, it has a strong marketing presence in the Rocky Mountain states. To better serve this and other markets following elimination of gasoline price and allocation controls in 1981, the company moved ahead with plans to construct additional low-cost, high-volume retail outlets while disposing of less efficient marketing properties.

Page 14

Petroleum Refining, Marketing and Transportation

United States petroleum refining, marketing and transportation operations were adversely affected by lower refined products sales volumes and higher overhead and operating expenses. Partially offsetting these factors were improved profit margins, reflecting the substitution of lower cost domestic crude oils under long-term agreements for higher priced imports.

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PETROLEUM REFINING, MARKETING AND TRANSPORTATION

United States Operations

Refining and Marketing Volumes. Domestic refined products sales decreased during 1981, while refinery inputs processed increased, as shown in the following table:

United States Operating Volumes (barrels daily)	1981	Change vs. 1980 Amount	%
Refined products sales:			
Gasoline	163,180	(6,657)	(3.9)
Middle distillate	80,992	(10,571)	(11.5)
Residual fuel oil and asphalt	49,372	6,934	16.3
Other products	37,968	4,079	12.0
Total	331,512	(6,215)	(1.8)
Refinery inputs processed*:			
Crude oil and condensate	290,987	6,993	2.5
Other feedstocks	10,539	1,665	18.8
Total	301,526	8,658	3.0

*Additional data shown on page 113.

The decline in gasoline sales is primarily attributable to the effects of energy conservation and the economic recession. Middle distillate sales decreased due to the disposition in September 1980 of a fuel oil distribution network on the East Coast. Sales of residual fuel oil and other products increased, reflecting the company's acquisition of Monsanto's interest in the chemicals feedstock unit at the Lake Charles, Louisiana refinery, as discussed under Refining Capacity Changes.

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ASHLAND OIL, INC.

YEAR ENDED SEPTEMBER 30

	1980	1981
Sales	$ 8,366,000,000	$ 9,506,000,000
Earnings	205,000,000	90,000,000
Number of Employees	24,600	34,400
Return on Average Shareholder's Equity	19.1%	6.3%
United States Motor Gasoline Sales as a Percentage of Ashland Worldwide Sales (by Barrels)	43.5%	45.5%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	3	None
On Shore Oil Rigs	—	1
Refineries	4	3
U.S. Gasoline Pumps	1	1
Gasoline Station Employees	None	None
Coal Mines	3	3
Corporate Citizenship	None	1
Research	—	1
Background of Chief Executive	Lawyer	Chemical Engineer
Percentage of Company Stock Owned by Corporate Officers and Directors	1.95%	2.28%
Number of Pages in Annual Report	68	65
Number of Pages Devoted to Gasoline Marketing	1	1¼

Number of Ashland Gasoline Stations in the United States:

12-31-81	2,200
12-31-80	2,437
12-31-79	2,400
12-31-76	2,700
12-31-71	N/A

Marketing of Petroleum Products

Ashland's principal marketing area for gasoline and fuel oils includes the Ohio River Valley and the upper Midwest, the Great Lakes, the middle Atlantic States, the East Coast and a portion of the southeastern United States. Petroleum product sales under the Ashland brand name are made primarily through retail outlets and bulk plants in Kentucky, southern Indiana, southern Illinois, western New York, Ohio, western Pennsylvania, western Virginia and West Virginia. Private brand stations owned by Ashland sell gasoline in all Ashland's principal markets.

Ashland markets petroleum products directly through 150 bulk plants, and also sells petroleum products under various brand names through approximately 2,200 retail outlets.

The major portion of Ashland's production of gasoline, kerosene and light fuel oils is sold at wholesale to railroads, river towing companies, commercial fleet operators, governmental agencies, the airline industry and distributors and independent jobbers who resell through several thousand outlets primarily under their own names. Ashland experiences intense competition at both wholesale and retail levels in light refinery products from a variety of sources, including major oil companies. Ashland also manufactures and markets liquified petroleum gas, asphalt and asphaltic products, pitch, base lube stocks, diesel fuel, residual fuels, petrochemicals, jet and ordnance fuels and synthetic natural gas.

Excerpt from 10K, page 4

What the Ashland Annual Report Says About Gasoline Marketing:

The Year In Review

For decades, Ashland has been known as one of the oil industry's most efficient petroleum refiners and the largest supplier of petroleum products to independent marketers in the United States. However, as is shown graphically on the facing page, petroleum refining and marketing form but one phase of Ashland's many business activities.

Page 7

A Business Strategy for the 1980s

Since the early 1970s, the climate for U.S. business in general and the petroleum industry in particular has been affected increasingly by events beyond the control of either individual companies or the U.S. government. To survive and prosper in such a volatile environment, companies must be willing to reappraise traditional operations and aggressively explore and develop new business opportunities. In June 1978, Ashland made the following statement during a major presentation to financial analysts:

"We are firmly committed to analyzing all of our operations to determine the changes necessary to ensure we are as successful in the future as we have been in the past."

Page 7

brand name through a small network of bulk plants and service stations, most of which are supplied by the Catlettsburg, Ky., refinery.

Wholesale gasoline sales have been expanded through the use of ten new regional terminals. These terminals are in areas which previously had not been supplied by Ashland.

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Excerpt from the Annual Report of Ashland Oil, Inc., September 30, 1981

Valvoline's position in the "do-it-yourself" automotive care product market has been strengthened by the introduction of a new twelve-can motor oil case (above left). Ashland Petroleum operates a marine fleet to transport petroleum products on the inland waterway system (above) and is expanding its network of combination merchandise and gasoline retail sales outlets (right).

Marketing

Although most of Ashland Petroleum's gasoline production is sold to independent wholesale marketers, the company also serves consumers through company-operated marketing outlets. These outlets include combination gasoline/merchandise "convenience" stores, operated under the brand names Superamerica and Save Mart.

Ashland was a pioneer in the concept of combined gasoline and merchandise marketing. The company now operates 158 Superamerica and 107 Save Mart outlets. With the success of these operations, a new program has been started to build more units in the regions served by Ashland's refineries.

A network of highly efficient large-volume stations continues to market gasoline and related products under several different company-owned brand names. The company also sells gasoline, distillate, fuel oils and related products under the Ashland

STANDARD OIL COMPANY OF OHIO (SOHIO)

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 11,346,000,000	$ 13,811,000,000
Earnings	1,811,000,000	1,947,000,000
Number of Employees	22,938	56,672
Return on Average Shareholder's Equity	39.7%	31.0%
United States Motor Gasoline Sales as a Percentage of SOHIO Worldwide Sales (by Barrels)	62.8%	65.0%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	None	2
On Shore Oil Rigs	—	3
Refineries	1	1
U.S. Gasoline Pumps	None	1
Gasoline Station Employees	None	None
Coal Mines	None	3
Corporate Citizenship	1	1
Research	—	2
Background of Chief Executive	Engineering and Finance	Engineering and Finance
Percentage of Company Stock Owned by Corporate Officers and Directors	46/100th of 1%	N/A
Number of Pages in Annual Report	66	56
Number of Pages Devoted to Gasoline Marketing	1-1/4	1-2/3

Number of SOHIO Gasoline Stations in the United States:

12-31-81	2,300
12-31-80	2,300
12-31-79	2,600
12-31-76	3,300
12-31-71	3,500

Marketing

Sohio is, and for many years has been, the leading marketer of gasoline and other refined petroleum products in Ohio, under the trade name "Sohio". Sohio also markets such products under the trade name "Boron", principally in central and western Pennsylvania, and to a limited extent in areas of Michigan, Kentucky, West Virginia and Indiana adjacent to Ohio. In addition, Sohio markets refined petroleum products under the trade names "BP", "Gibbs", "Scot" and "Wm. Penn" through retail outlets in eastern markets north of North Carolina. The trade name "Gas & Go" is used in connection with retail outlets in southeastern Michigan.

Throughout its marketing area, Sohio supplies directly (other than through jobbers) a total of approximately 2,300 retail outlets. More than half of these outlets are operated by employees of Sohio, the others through independent dealers. Sohio markets automotive petroleum products through full service, limited service and self-service facilities. It also operates gasoline and car wash facilities and specialized car care facilities, and has opened, on a selective basis, convenience stores at certain of its facilities. Sohio supplies refined petroleum products to industrial, commercial, governmental and agricultural accounts. In 1981 Sohio acquired an independent petroleum marketer based in Massachusetts with facilities located in Maine, Massachusetts and New Hampshire.

Excerpt from 10K, page 6

What the Standard Oil (Sohio) Annual Report Says About Gasoline Marketing:

During 1981 Sohio decided to close permanently the Cleveland asphalt plant since its age and inefficiency placed it at a competitive disadvantage. As the last vestige of the Number 1 refinery which was closed in 1966, it was too antiquated to warrant renovation. Sohio continues to be capable of producing asphalt at the Toledo refinery.

Conservation, prompted by higher product prices, along with the growing number of more energy-efficient automobiles resulted in reduced gasoline demand nationwide in 1981 — the third straight year of decline. The marketplace is reacting. Marketers are withdrawing from their weaker markets. But the strength of the Sohio brand and the company's cost-efficient marketing operations in the Midwest and Northeast will enable it to compete effectively during this period.

Sohio continues consolidation of its retail effort to maximize volume per outlet while minimizing expenses. The popularity of self-service and the growing demand for diesel fuel have been recognized by having both readily available at Sohio and Boron stations. Convenience stores are being opened at Sohio self-service stations on a selective basis to meet this growing preference of the motoring public.

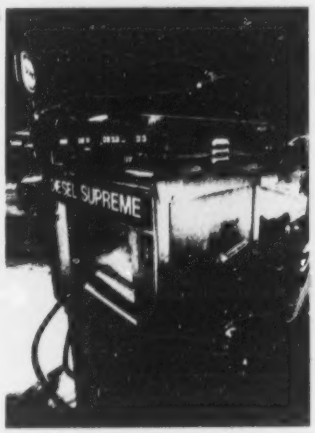
The East Coast gasoline-only retail outlet chain, operated by Sohio, was expanded in 1981 with the acquisition of Gibbs Oil. Gibbs was an independent petroleum marketer of our products and, as such, was our largest customer. This acquisition gives Sohio a firm foothold in the major metropolitan markets of New England.

Our marketing style on the East Coast continues to feature high-volume, low-margin, no-frills retail operations in the major metropolitan markets while we serve the rest of the Virginia to Maine area as a supplier of independent jobbers.

Though different in appearance, the marketing and refining operations in Ohio and in the Northeast are both well equipped and highly efficient, attributes which are essential to profitability in the environment ahead.

3. Diesel fuel is now widely available at Sohio and Boron outlets to meet growing consumer demand.

3



Page 3

Sohio has a well-established reputation for refining and marketing quality petroleum products. It utilizes petroleum feedstocks in the manufacture of industrial and agricultural petrochemicals and has a strong position in coal.

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Excerpt from the Annual Report of Standard Oil Company (Sohio), December 31, 1981

Downstream Operations

(Barrels Per Day)	1981	1980
Refinery Runs	362,000	400,900
Refinery Capacity (Year-end, Per Calendar Day)	452,000	452,000
Refined Products Sold:		
Gasoline	246,117	260,531
Distillates	95,530	98,093
Residuals	21,815	39,282
Other	14,968	16,604
	378,430	414,510
Marketing Retail Outlets*	2,300	2,300

*Excludes outlets supplied by jobbers, automobile dealers, marine dealers, etc.

Refining and Marketing

Sohio's superior refining capability, its efficient marketing network, and its favorable crude oil position enabled the company to respond quickly to changing market conditions in 1981. Downward pressure on profit margins caused by the escalation of crude oil prices early in the year coupled with a sluggish economy which reduced demand for petroleum products caused many companies to fare poorly in their downstream business in 1981.

Operating income from Sohio's petroleum refining and marketing operations in 1981 was $256 million, up 3 percent from the record $248 million of 1980. Results for 1981 include a $30-million write-off of a sulfur removal project at the Toledo refinery.

The total refining capacity of Sohio's units in Lima and Toledo, Ohio, and Marcus Hook, Pennsylvania, is 452,000 barrels of crude per day. In 1981, Sohio's refinery runs averaged 362,000 barrels per day compared with 401,000 barrels per day in 1980. Sohio utilized 80 percent of its total refining capacity in 1981, well above the industry average of about 68 percent, although 9 percent below Sohio's 1980 operating rate.

Past investments at our refineries for upgrading equipment provide both gasoline and distillate production capability and also flexibility between these products which are superior to most in the industry. These advantages, coupled with the company's ability to trade its Alaska crude oil for oil better suited for our refining equipment, position Sohio well in today's competitive environment.

Sohio's refining equipment and crude oil supply capabilities resulted in a refinery yield of 89 percent of the more valuable light products compared with an industry average of about 79 percent in 1981.

Refining and marketing will continue to represent important sources of earnings and cash flow for Sohio.

2

2. Sohio sells gasoline under these brands in its Midwest and Northeast U.S. markets.

SUN COMPANY

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 12,945,000,000	$ 15,012,000,000
Earnings	1,076,000,000	723,000,000
Number of Employees	48,086	45,062
Return on Average Shareholder's Equity	16.8%	21.5%
United States Motor Gasoline Sales as a Percentage of Sun Worldwide Sales (by Barrels)	46.8%	45.9%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	1	1
On Shore Oil Rigs	–	4
Refineries	None	None
U.S. Gasoline Pumps	1	1
Gasoline Station Employees	With pump	None
Coal Mines	3	2
Corporate Citizenship	5	4
Research	–	2
Background of Chief Executive	Chemical Engineering	Chemical Engineering
Percentage of Company Stock Owned by Corporate Officers and Directors	6.05%	5.00%
Number of Pages in Annual Report	60	65
Number of Pages Devoted to Gasoline Marketing	2	2

Number of Sun Gasoline Stations in the United States:

12-31-81	8,400
12-31-80	9,000
12-31-79	N/A
12-31-76	13,200
12-31-71	N/A

Marketing

The principal refined products which Sun markets are fuels, lubricants and petrochemicals. Refined products manufactured and sold for the five year period ended December 31, 1981 are set forth in the tables on pages 57 and 58 of Sun's 1981 Annual Report to Shareholders.

Fuels. Sun sells substantial volumes of gasoline, middle distillates and other fuels, primarily to North American customers. However, the volume of such fuels sold declined from approximately 472,000 barrels daily in 1980 to approximately 420,000 barrels daily in 1981. Fuels are sold to wholesale, commercial, industrial and retail customers. Retail sales of gasoline under the "Sunoco" and "DX" brands are made largely through service station outlets operated by independent dealers in a marketing area in the eastern one-half of the United States and Southern Ontario and Quebec.

During the past six years, Sun has undertaken a program of divesting marginal service stations and of consolidating its gasoline marketing into a smaller geographic area. The number of branded service station outlets has been reduced to approximately 8,400 units at the end of 1981 from 13,200

Excerpt from 10K, page 8

gasoline is sold through self service and convenience store outlets.

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What the Sun Annual Report Says About Gasoline Marketing:

Page 13

High volume service stations, like this one on the New York State Thruway, are part of Sun's marketing strategy to compete for gasoline sales.

Page 12

Excerpt from the Annual Report of Sun Company, December 31, 1981

Refining and Marketing

Sale of Corpus Christi, Texas, refinery trims capacity

High raw material cost and competitive refined products market put pressure on profitability

Gasoline marketing focuses on locations with strong demand and growth potential

Sun's lubes production second largest in nation

Bunkering service facility completed in Louisiana; tank capacity added in Texas

Refining and Marketing (Except Canada)

	1981	1980
Input to Crude Units *(Barrels Daily)*	382,709	438,927
Sales of Refined Products *(Barrels Daily)*	478,577	544,980

Sun Refining and Marketing Company conducts Sun's domestic refining, marketing and transportation activities, and internationally (except for Canada) is responsible for resales of purchased oil, overseas product marketing and the operation of Sun's marine fleet.

In 1981, refining and marketing's profit contribution was $203 million, up $26 million, or 15 percent from the profit contribution in 1980. The 1981 profit contribution includes a gain of $119 million from the sale of the Corpus Christi, Texas, refinery and certain related assets. The 1980 figure included a similar $66 million after-tax gain from the sale of the Duncan refinery in Oklahoma. Excluding these sales, 1981 results were down 24 percent from prior year earnings.

Second half 1981 profit contribution from domestic refining and marketing operations improved enough to overcome losses experienced earlier in the year when decontrol of domestic crude oil caused raw material costs to rise rapidly. This, added to already high prices being paid for foreign crude oil under contracts negotiated during the uncertainty at the start of the Iran-Iraq war, resulted in unexpectedly high composite raw material costs.

In addition, fully supplied and very competitive refined products markets limited Sun's ability to raise prices to recover the higher costs completely. However, by mid-year these steps were taken to restore profitability:

- Sun exercised its rights, under terms in foreign crude oil supply contracts, to renegotiate for more competitive prices or suspend purchases;
- Product prices were adjusted as rapidly as market conditions permitted;
- Inventories were managed closely to minimize carrying costs.

The sale in November of the Corpus Christi refinery and certain related assets for $265 million in cash was undertaken in part to reduce Sun's refining capacity in response to an expected long-term decline in U.S. gasoline demand.

An important result of this sale, coupled with the divestment of the Duncan refinery and the purchase of the exploration and production properties of Texas Pacific in 1980, is the further enhancement of Sun's self-sufficiency in domestic crude oil supply for its refineries.

Self-sufficiency — Sun's net U.S. production of crude oil and condensate divided by inputs to Sun's domestic refinery crude units — is expected to reach 50 to 55 percent in 1982, compared to 48 percent in 1981 and 39 percent in 1980.

Also further strengthened in 1981 were Sun's wholesale marketing operations. About one-third of total gasoline volume now moves in the unbranded channel, chiefly in mid-continent states from which Sun has been withdrawing as a branded marketer.

Sun is also modernizing branded service stations and reinforcing the brand in those locations where the company is already strong and which will continue to be important markets in years to come.

Crude oil and refined products purchased overseas fulfill a significant portion of Sun's domestic supply needs.

Page 11 *continued*

Sun's established and ongoing position in these activities enabled the company to both renegotiate existing supply contracts and secure new sources of supply on more favorable terms.

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PHILLIPS PETROLEUM COMPANY

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 13,712,900,000	$ 16,288,000,000
Earnings	1,070,000,000	879,000,000
Number of Employees	32,400	34,500
Return on Average Shareholder's Equity	23.8%	16.9%
United States Motor Gasoline Sales as a Percentage of Phillips Worldwide Sales (by Barrels)	42.0%	41.7%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	6	8
On Shore Oil Rigs	—	3
Refineries	3	4
U.S. Gasoline Pumps	None	None
Gasoline Station Employees	None	None
Coal Mines	None	1
Corporate Citizenship	3	3
Research	—	4
Background of Chief Executive	Finance	Refining and Chem. Engineering
Percentage of Company Stock Owned by Corporate Officers and Directors	7.8%	8.3%
Number of Pages in Annual Report	76	77
Number of Pages Devoted to Gasoline Marketing	½	1-1/3

Number of Phillips Gasoline Stations in the United States:

12-31-81	13,900
12-31-80	12,805
12-31-79	13,500
12-31-76	17,700

Marketing:

In the United States, the company markets refined petroleum products under the Phillips 66 trademark with its highest market concentration in the Midwest. Gasoline and other refined products, as well as tires, batteries and automotive accessories manufactured by others, are distributed in the United States through approximately 14,300 service stations, bulk distributing plants and marinas. Of these, Phillips owns or leases approximately 1,100 service stations and bulk plants, 1,000 of which are leased. In 1980 distribution was made through approximately 12,800 service stations, bulk distributing plants and marinas. Phillips is one of the leading suppliers of aviation gasoline and turbine fuel to the private sector of the market. The company markets through more than 700 fixed based operators who supply major airlines and regional carriers. Petroleum product sales in the United States during 1981 averaged 446,000 barrels daily, compared with 460,000 barrels daily in 1980.

Excerpt from 10K, page 11

Petroleum Products

Petroleum refining, marketing and transportation operations had lower earnings in 1981 than in 1980. Net income in Petroleum Products activities was $25 million in 1981, compared with $64 million in the previous year. An additional $18 million was realized in 1981 from equity in earnings from affiliated companies related to refining, marketing and transportation, compared with $15 million in 1980.

The U.S. refining industry experienced a sharp increase in raw material costs at the beginning of the year as world oil prices increased and domestic oil prices were decontrolled. Although costs moderated later in the year, vigorous competition in petroleum product markets prevented full recovery of higher costs. As a result, industry profit margins were reduced. Largely because of the sluggish U.S. economy and widespread consumer conservation, total industrywide demand for petroleum products fell nearly 6 percent below the already reduced levels experienced in 1980.

After posting losses in the first half, Phillips refining, marketing and transportation operations improved in the second half. The improvement resulted in part from the company's expanded and modernized Sweeny, Texas, refinery becoming operational. The refinery is able to process lower cost, heavier crude oils, thereby allowing higher margins. Phillips also was able to counter the industry trend of reduced gasoline

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sales by delivering additional product and by acquiring new business in markets where other companies had withdrawn. As a consequence, Phillips gasoline sales were down only 3 percent, compared with the industry decline of 5 percent.

In addition to the decline in earnings from U.S. operations, international operations were also less profitable than in 1980. This was caused primarily by adverse economic conditions in the United Kingdom.

The company continued to position itself for what appear to be increasingly competitive years ahead. A second refinery modernization continued on schedule; preparations were made for further consolidating refining and marketing operations; new marketing strategies were undertaken, including initiating the sale of premium unleaded gasoline, and increased emphasis was put on aviation products.

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Petroleum Refining, Marketing and Transportation
Petroleum Refining, Marketing and Transportation operations earnings for 1981 were $25 million compared with $64 million in 1980 and $179 million in 1979. During these years Phillips experienced much higher raw material and operating costs (refinery throughput costs) and slightly lower domestic sales volumes of refined petroleum products due to competitive market conditions. Although the effect of increased costs was partially offset by product price improvements, prices have leveled off and in some cases declined in the last half of 1981, impacting product margins.

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Excerpt from the Annual Report of Phillips Petroleum Company, December 31, 1981

Marketing

Removal of petroleum products price and allocation controls created industrywide changes in gasoline and propane marketing, tending to increase price competition and create greater marketing flexibility. Phillips sales volumes were 3 percent lower for automotive gasoline and 4 percent lower for distillates in 1981, compared with 1980. After a sharp decline in the first and second quarters, automotive gasoline sales rebounded at mid-year and continued at higher levels. The improvement was achieved by increasing deliveries to jobbers who showed they could expand sales and by obtaining business other companies lost when withdrawing from markets.

Phillips average wholesale prices at the end of 1981 were eight cents a gallon higher for automotive gasoline and 13 cents a gallon higher for distillates as compared with the end of 1980. Profit margins were lower during the first half as vigorous marketplace competition and relatively high crude costs prevented the full recovery of costs. Margins improved in the second half as worldwide crude prices declined and as more lower-cost crude oils were processed at the modernized Sweeny refinery. Margins also benefited from increased sales in the second half.

Phillips began marketing premium unleaded gasoline in December through terminals from the Gulf Coast of Texas through the southeastern states. The fuel is produced by the Sweeny refinery. Distribution will be expanded as demand increases. On an industry basis, premium unleaded now accounts for nearly 10 percent of total gasoline sales and is forecast to grow to 20 percent by 1985.

Phillips remained committed to marketing primarily to jobbers, believing that the operations of independent businessmen are often more responsive to local market conditions than company-operated facilities. The company delivers products to some 1,700 jobbers who supply approximately 13,900 marketing outlets. During the year, 26 marginal

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Evaluating Profit Potential

Efforts continued in 1981 to make our refining, transportation and marketing operations more efficient and competitive. During the year the new units at our enlarged and modernized Sweeny, Texas, refinery went into operation, while construction progress was made on a similar modernization project at our refinery in Borger, Texas. These projects are designed to increase margins by allowing the conversion of lower cost, heavier crude oils into high-value products. As part of an effort to concentrate our refining and

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marketing operations in areas with the greatest growth potential, we sold the Great Falls, Mont., refinery and withdrew from the markets it served. We also announced on March 9, 1982, plans to close our refinery in Kansas City in August, unless a buyer can be found before that time. These actions were taken in response to declining demand for petroleum products, a trend which is causing a reduction in refining capacity throughout the industry. The marketing of petroleum products will be increasingly competitive in the years ahead. Vigorous and imaginative marketing efforts will be required to maintain profitability in a shrinking overall market.

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We also expect the demand for petroleum products to remain weak, in part because of continued conservation efforts and in part because of slow economic activity throughout the world.

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CITIES SERVICE COMPANY
YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 7,442,000,000	$ 8,546,400,000
Earnings	447,500,000	(49,200,000)
Number of Employees	18,900	20,200
Return on Average Shareholder's Equity	19.9%	LOSS
United States Motor Gasoline Sales as a Percentage of Cities Service Worldwide Sales (by Barrels)	54.9%	58.0%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	1	1
On Shore Oil Rigs	–	1
Refineries	1	2
U.S. Gasoline Pumps	1	1
Gasoline Station Employees	None	None
Coal Mines	1	None
Corporate Citizenship	None	None
Research	–	3
Background of Chief Executive	Engineering	Engineering
Percentage of Company Stock Owned by Corporate Officers and Directors	50/100th of 1%	50/100th of 1%
Number of Pages in Annual Report	48	56
Number of Pages Devoted to Gasoline Marketing	1	1¼

Number of Cities Service Gasoline Stations in the United States:

12-31-81	5,784
12-31-80	5,300
12-31-79	N/A
12-31-76	N/A
12 31-71	N/A

The Company produces and markets a wide range of petroleum products including gasoline, distillates and residual fuels, kerosene, turbine fuel, lubricants and specialty products. Petroleum products are marketed under the CITGO brand through retail outlets and to wholesale, commercial and industrial customers. Approximately 5,800 retail outlets are supplied on a direct basis or through distributors, 350 of which are Company operated Quik Marts. Approximately 75 percent of total gasoline volume is sold through distributors who share the Company's marketing strategy of self-service, high unit volume convenience store type outlets.

Excerpt from 10K, Marketing, page 3

What the Cities Service Annual Report Says About Gasoline Marketing:

CITGO petroleum products are sold at nearly 6,000 retail outlets. Some, such as this one in Nashville, Tennessee, are owned and operated by independent distributors. Others are operated by the Company's retail marketing division.

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In the downstream activities of refining and marketing of petroleum products, the immediate outlook is not good for the industry. Demand for all products has continued to fall resulting in weak prices—a situation that can improve only when the general economy picks up.

Last year those market conditions lessened refinery throughput requirements and provided the opportunity for the Company to complete one of the busiest turnaround and revamping schedules ever conducted at the plant. At the same time, the Company carried on a significant construction program. A 45,000-barrel-a-day reformer, which will allow us to satisfy the growing demand for unleaded gasoline and to expand sales of the new CITGO Super Unleaded gasoline, is nearing completion. Construction of a 2,000-ton-a-day delayed coker, scheduled for completion late next year, will make possible the processing of more low-quality, less-costly, heavy sour crudes. The final step will be the addition of a 30,000-barrel-per-day hydrocracker in 1984.

Page 3

Strengthening jet turbine fuel sales are symbolized by a Miami, Florida refueling operation, and a self-serve unit is indicative of many wholesalers' switch to the convenience store method of gasoline marketing.

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New construction continues at a record pace at the Lake Charles refinery. Within two years, it will be equipped to produce all unleaded gasoline, process the most economical world crudes available and have the flexibility to switch to high-value transportation fuels to meet market conditions.

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Excerpt from the Annual Report of Cities Service, December 31, 1981

David A. Hentschel
Executive Vice President and President, Petroleum Products Group

Full decontrol of domestic crude oil prices occurred in January 1981. The equalization of domestic prices with world markets, along with a price increase in December 1980 by the Organization of Petroleum Exporting Countries, put a cost squeeze on refiners and marketers.

Industry product prices initially were higher in an attempt to recover increased costs, but have fallen steadily since the first quarter of 1981 because of declining consumption. Domestic oil demand dropped 6 percent compared to 1980. Gasoline demand was down 5 percent in 1981 and off 13 percent from the peak consumption year of 1978. Turbine fuel sales declined 7 percent, reacting to economic conditions and the air traffic controllers situation. Distillate demand fell by 4 percent.

Marketing—Cities Service's petroleum product sales declined 8 percent in 1981. Gasoline sales were off 3 percent while turbine fuel sales were up 3 percent. Distillate sales were down 19 percent. Unleaded gasoline demand rose and now represents 43 percent of total gasoline sales.

Despite considerable distributor turnover after decontrol, Cities Service added nearly 100 new wholesalers who made major contributions to 1981 product sales.

Self-serve units with high gasoline volume and convenience merchandise continued to receive emphasis in both retail and wholesale marketing activities. During the year, 35 new Company-owned Quik Mart units were added in the sunbelt marketing areas of Oklahoma, Texas and the Southeast. Gasoline volume at the stores increased 21 percent while merchandise sales were up 52 percent.

Total lubricant sales were off 4 percent from 1980; however, sales of CITGO branded motor oil increased 9 percent. Finished lubricant sales accounted for 69 percent of the total, up from 66 percent in 1980.

Wax volumes continued at a sold-out position while sales of tires, batteries and accessories declined 7 percent.

UNION PACIFIC
CHAMPLIN PETROLEUM
YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 2,602,252,000	$ 3,981,033,000
Earnings	191,011,000	160,133,000
Number of Employees	N/A	N/A
Return on Average Shareholder's Equity	19.0%	N/A
United States Motor Gasoline Sales as a Percentage of Champlin Worldwide Sales (by Barrels)	N/A	N/A
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	1	1
On Shore Oil Rigs	–	3
Refineries	3	3
U.S. Gasoline Pumps	None	None
Gasoline Station Employees	None	None
Coal Mines	1	2
Corporate Citizenship	2	6
Research	–	None
Background of Chief Executive	Geologist	Geologist
Percentage of Company Stock Owned by Corporate Officers and Directors	1%	1.19%
Number of Pages in Annual Report	48	50
Number of Pages Devoted to Gasoline Marketing	1/10 page	1/2 page

Number of Champlin Gasoline Stations in the United States:

12-31-81	863
12-31-80	850
12-31-79	900
12-31-76	N/A
12-31-71	N/A

What the Champlin Union Pacific Annual Report Says About Gasoline Marketing:

expired) that called for the purchase of crude oil from two OPEC nations at prices well above alternative spot market prices.

A shakeout of major proportions is under way in the U.S. refining industry. More than 1 million barrels of daily capacity were shut down during 1981, and a substantial amount of additional capacity is expected to be closed in 1982. The surviving refineries will be those that are capable of processing a wide variety of crude oils into the higher value products that are likely to be in increasing demand.

Champlin is committed to making the investments that are necessary to achieve this versatility. A $440 million modernization program is currently under way at its Corpus Christi, Texas, and Wilmington, California, refineries. A substantial increase in Champlin's capabilities to produce higher octane unleaded gasolines is a key component of the program. Over the next decade, it is estimated that demand for unleaded gasoline will increase by 4 percent annually, and demand for premium unleaded will grow by 10 percent annually.

Champlin presently has the capacity to produce a larger percentage of higher value products than is typical for the industry. Largely for this reason its refineries were able to operate at an average rate of 79 percent of capacity in 1981, substantially above the industry average of 66 percent. When the current modernization program is completed in 1983, Champlin will be able to produce 110,000 barrels of unleaded gasoline per day, about 30 percent of which could be premium unleaded.

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Manufacturing, Marketing and Petrochemicals

The country's refining industry was afflicted by both higher feedstock costs and a lower level of demand in 1981. The industry was under severe stress, and Champlin's refineries were no exception. Total demand for petroleum products fell by 6.5 percent in the United States in 1981 and has declined by 14.2 percent over the past two years. During the first six months of 1981, Champlin also was severely affected by two contracts (now

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Champlin Petroleum Company

Millions of Dollars	1981	1980	1979
Revenues	$3,981	$2,602	$2,060
Net Income	$ 160	$ 191	$ 182

An integrated petroleum company engaged in the exploration, production, refining, transportation and marketing of petroleum products. Champlin Petroleum has increased its reserves of liquid hydrocarbons and natural gas for the last four years. At the end of 1981, Champlin's proved reserves totaled 142 million barrels of liquid hydrocarbons and 2 trillion cubic feet of natural gas. Production of liquids and natural gas rose for the sixth consecutive year in 1981. Champlin, in addition to its access to Upland's large land bank, has lease holdings of 3.1 million acres in North America. Champlin refineries in Texas, California and Oklahoma have a total processing capacity of 290,000 barrels per day. The company also is the operating partner of a world-scale petrochemical complex in Corpus Christi, Texas.

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Champlin Petroleum Company's two principal business components operated in strikingly different environments during the year. Production of hydrocarbons was up for the sixth year in a row, and the exploration and production side of Champlin's business posted record operating income of $396.6 million, a 40 percent increase over 1980. But the manufacturing and marketing side suffered from a combination of declining demand for petroleum products and unexpectedly high crude costs caused by the decontrol of domestic crude oil in January. As a result, manufacturing and marketing and petrochemicals operated in the red through the first half of 1981 and posted an operating loss of $37.7 million for the full year.

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Champlin Petroleum

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Excerpt from the Annual Report of Union Pacific Corporation (Champlin Petroleum), December 31, 1981

GETTY OIL COMPANY

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 10,320,953,000	$ 13,037,841,000
Earnings	871,866,000	856,865,000
Number of Employees	17,318	19,100
Return on Average Shareholder's Equity	21.0%	18.0%
United States Motor Gasoline Sales as a Percentage of Getty Worldwide Sales (by Barrels)	38.2%	37.5%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	2	2
On Shore Oil Rigs	—	2
Refineries	3	4
U.S. Gasoline Pumps	2	1
Gasoline Station Employees	None	2
Coal Mines	1	3
Corporate Citizenship	None	1
Research	—	2
Background of Chief Executive	Business Administration	Business Administration
Percentage of Company Stock Owned by Corporate Officers and Directors	50.36%	50.68%
Number of Pages in Annual Report	80	81
Number of Pages Devoted to Gasoline Marketing	2	1½

Number of Getty Gasoline Stations in the United States:

12-31-81	5,071
12-31-80	5,787
12-31-79	6,381
12-31-76	7,663
12-31-71	N/A

Marketing Facilities

At December 31, 1981, Getty marketed its petroleum products in 29 states under the "Getty," "Mohawk," "Skelly" or "Surfco" trademarks, or unbranded. LPG was marketed under the "Skelgas" trademark in 15 states in the central United States through 135 direct marketing branches and 228 wholesale distributors. Fertilizer was marketed under the "Skelgro" trademark at 90 of these branches.

At December 31, 1981, Getty owned or leased 1,088 service stations, 257 of which were operated by Getty. Branded gasoline was also sold through 1,401 dealers under contract and 2,219 jobber and distributor retail accounts. Getty owns or leases 27 bulk plants and terminals from which service station and consumer accounts were supplied.

Excerpt from 10K, page I-20.

What the Getty Annual Report Says About Gasoline Marketing:

Getty service station attendant in Lakewood, New Jersey.

Skelly marketing outlet in Kansas City, Missouri.

In 1981 the petroleum product marketplace was characterized by declining demand, primarily due to high prices which prompted more efficient product utilization by consumers. Industry gasoline sales declined in the three regions where Getty Refining and Marketing Company sells motor fuel products. Getty Refining and Marketing's gasoline sales were 1,850 million gallons during 1981, compared with 1,985 million gallons sold in 1980.

In the 11 northeastern states where products are sold under the Getty trademark, the company's gasoline sales totaled 840 million gallons in 1981, compared with 912 million gallons sold during 1980. Unleaded gasoline accounted for 64 percent of Getty Refining and Marketing's eastern region gasoline sales in 1981, compared with about 60 percent of 1980 gasoline sales in that region.

In the central region, where Skelly and Surfco products are marketed in 15 states, gasoline sales amounted to 826 million gallons during the year, compared with 859 million gallons sold in 1980. Unleaded gasoline accounted for 37 percent of 1981 gasoline sales, compared with 34 percent in 1980. Gasoline sales were lower in 1981 because of reduced demand and the withdrawal of the company's marketing operations from Arkansas, Louisiana, Mississippi, New Mexico and Texas. Getty Refining and Marketing's share of the motor fuel market in the five-state area was less than one percent. The withdrawal, which began in May, 1981, will be completed when contractual obligations with remaining accounts in Arkansas and Texas are fulfilled.

In the west, where products are sold under the Mohawk trademark in California and Arizona and unbranded products are sold in Arizona, California and Nevada, gasoline sales totaled 184 million gallons in 1981, compared with 214 million gallons sold in 1980. Unleaded gasoline accounted for 48 percent of the 1981 total, compared with 35 percent in 1980.

The sale of leaded premium gasoline was discontinued in each marketing region during 1981 because of low demand. Leaded premium was replaced by a new unleaded premium product in the central and western marketing regions and with leaded regular gasoline in the eastern region.

Gasoline products were sold through about 4,700 service stations during 1981. At yearend 1981 approximately 1,100 of these retail stations were owned or leased by Getty Refining and Marketing, including about 260 that were company operated. Products also were marketed through approximately 1,400 dealer-owned retail outlets and about 2,200 service stations owned or leased by jobbers or distributors. In addition, Getty Refining and Marketing owned or leased 27 bulk plants and terminals which supplied service stations and consumer accounts with gasoline.

Excerpt from the Annual Report of Getty Oil Company, December 31, 1981

Getty-operated station in Freehold, New Jersey.

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Manufacturing and Marketing Getty Refining and Marketing Company, a wholly owned subsidiary based in Tulsa, operates refineries in Delaware City, Delaware; El Dorado, Kansas; and Bakersfield, California. In 1981 the subsidiary marketed petroleum products under the Getty trademark in the northeastern portion of the United States, under the Skelly, Skelgas and Surfco trademarks in the midcontinent states and under the Mohawk trademark in California and Arizona.

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Manufacturing and Marketing Refinery input, including processing for others, was 265,900 barrels per day in 1981. This compares with 269,400 barrels per day in 1980. A daily average of 334,400 barrels of refined products, including natural gas liquids, was sold in 1981, down from a 1980 daily average of 351,300 barrels. Sales for both years included refined products purchased for resale.

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We are proud of Getty's performance during the past year. We also believe the company is well positioned to meet the formidable challenges which lie ahead. The year 1981 again demonstrated the resilience of the petroleum industry if allowed to function in a free, competitive marketplace.

In January, 1981, price and allocation controls on domestic crude oil and refined petroleum products were ended. In our annual report to you last March, we anticipated that decontrol would offer an opportunity to demonstrate again the efficiency of business in responding to consumer wants and meeting America's energy demands.

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Excerpt from the Annual Report of Getty Oil Company, December 31, 1981

THE COASTAL CORPORATION
YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 5,115,368,000	$ 5,909,702,000
Earnings	109,500,000	(96,399,000)
Number of Employees	6,942	7,215
Return on Average Shareholder's Equity	18.7%	LOSS
United States Motor Gasoline Sales as a Percentage of Coastal Worldwide Sales (by Barrels)	N/A	N/A
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	None	None
On Shore Oil Rigs	—	3
Refineries	1	3
U.S. Gasoline Pumps	1	None
Gasoline Station Employees	None	None
Coal Mines	3	1
Corporate Citizenship	None	None
Research	—	None
Background of Chief Executive	Mechanical Engineer	Mechanical Engineer
Percentage of Company Stock Owned by Corporate Officers and Directors	7.6%	8.1%
Number of Pages in Annual Report	52	53
Number of Pages Devoted to Gasoline Marketing	2/3	2-1/2

Number of Coastal Gasoline Stations in the United States:

12-31-81	565
12-31-80	550
12-31-79	N/A
12-31-76	N/A
12-31-71	N/A

DOMESTIC MARKETING

The Belcher Companies

Coastal's three marketing subsidiaries, Belcher Oil Company, Belcher New England, Inc. and The Belcher Company of New York, Inc. (the "Belcher Companies"), which have a refined products distribution network along the Atlantic and Gulf coasts, are marketers of heavy fuel oil and distillates as well as asphalt, jet fuel, gasoline, lubricating oil and liquefied petroleum gas. The Belcher Companies market in 24 states through 18 major terminals with tank storage capacity totaling 13 million barrels, including owned and leased facilities.

Derby Refining Company ("Derby"), a Coastal subsidiary, owns a 30,000 barrels per day refinery in Wichita, Kansas, which has an average daily throughput of 28,600 barrels in 1981 and 26,500 barrels daily in 1980. The Wichita refinery receives most of its crude from domestic sources, primarily Kansas and Oklahoma, and the balance is imported crude. Most of the domestic supply is delivered to the plant via the 50%-owned Jayhawk Pipeline system. Most of the refinery's gasoline production is marketing under the Derby brand name, primarily by some 565 service stations in 12 midwestern states, of which 212 are owned or leased by Derby and 353 are owned and operated by independent jobbers and dealers. Approximately one half of these stations are located in Kansas and Missouri.

Excerpt from 10K, pages 20 & 21

What the Coastal Annual Report Says About Gasoline Marketing:

To Our Security Holders:

1981 was a year of crosscurrents for Coastal. Two of our three principal businesses—gas pipeline operations and oil, gas and coal production—did well. In contrast, some parts of refining and marketing experienced losses which more than offset these gains. We also initiated a plan which is intended to result in a major restructuring of the Company.

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pipelines, which transport crude oil, refined products and natural gas liquids, operated profitably and throughput capacity of the products line was expanded.

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Refining, marketing and transportation operations suffered from poor industry conditions in 1981. In response to these pressures which have carried over into early 1982, we have taken several remedial steps. Refinery runs were reduced and one refinery has suspended crude processing. Inventories of crude and refined products have been reduced to levels more in line with current demand, a move which produced a pre-tax LIFO inventory liquidation profit of $60 million in 1981. Unprofitable tanker operations have been reduced. Purchases of crude and products are being limited almost entirely to volumes needed to support current Company requirements.

These adjustments are designed to improve refining and marketing operations in a period of industry turmoil. However, full recovery to satisfactory profit levels will depend on improved industry conditions which, in turn, will be dependent on recovery from the current economic recession and restoration of acceptable profit margins.

Despite the 1981 results, there were bright spots in refining and marketing. Our Derby Refining Company subsidiary operated profitably during the year. This refinery is being modified to increase output of transportation fuels having the strongest demand, particularly unleaded premium gasoline. The Belcher marketing and terminaling subsidiaries were also profitable in 1981 although less so than in 1980. Our liquids

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Refining and Marketing
(Millions)

	1981	1980	1979
Revenues	$4,679.9	$4,083.8	$3,481.3
Operating Profit (Loss)	$ (51.2)	$ 195.4	$ 192.3
Assets	$1,545.8	$2,627.0	$2,605.6
Capital Expenditures	$ 70.4	$ 84.1	$ 54.9

In 1981, worldwide markets for crude oil and refined products were characterized by unusually high inventories and decreasing prices, reflecting depressed economic conditions and consumer conservation.

The operations of Coastal's four refineries were affected by market conditions. Refineries in Corpus Christi, Texas and Antwerp, Belgium reported losses in 1981. In response to these conditions, cost-cutting measures and inventory reduction programs were intensified at all refineries during the year.

The Company's wholesale marketing operations sell refined products and liquefied petroleum gas through a marketing network that covers many areas of the country. Retail marketing is primarily concentrated in the Midwest and East Coast. Outside the United States, the Company markets crude oil and refined petroleum products on a worldwide basis, with the greatest activity in Europe and the Far East.

In connection with its refining and marketing business, Coastal operates a transportation system that includes tankers, barges, liquids pipelines, tank cars and tank trucks.

REFINED PRODUCTS MARKETING

In 1981, sales of refined products from Coastal's domestic refineries amounted to 70.4 million barrels. This compared with 80.4 million the year before. Of total 1981 output, 35% was gasoline, 35% middle distillates such as diesel, jet fuel and home heating oil, and 30% heavy industrial fuels and other products.

In addition, Coastal's marketing activities include sales of products purchased from others in the United States and abroad.

THE BELCHER COMPANIES

The Belcher group of subsidiaries operated profitably in 1981, although at a lower level than in the prior year. Sales in 1981 totaled 60.3 million barrels of products, primarily fuel oils. The year before, Belcher sold 62.3 million barrels of products.

Belcher sells products from Coastal's refineries as well as products purchased from others. Markets include the East Coast from Maine to Florida and the Gulf Coast.

Miami-based Belcher Oil Company operates nine fuel oil terminals and marketing offices in Florida and one each in Texas, Alabama, Georgia, Arkansas, South Carolina and Virginia. Storage capacity totals 9.7 million barrels. In addition to direct sales, products are stored and delivered for others on a fee basis.

Belcher operates one of the largest tug and barge fleets in the Southeast for the transportation of oil and for delivering bunker fuel to ocean-going vessels. The fleet includes two large tug/barge units with deep sea transport capabilities, each capable of carrying several grades of petroleum products or chemicals.

The Belcher Company of New York, Inc., operates a marine terminal at Bayonne, New Jersey, with a storage capacity of two million barrels, and a smaller terminal in Manhattan to service markets in the New York harbor area and nearby areas of New Jersey and Pennsylvania.

Belcher New England, Inc., headquartered at Revere, Massachusetts near Boston, markets fuel oil and gasolines throughout much of New England. Its 14 owned and leased distribution terminals, totaling 2.4 million barrels of storage capacity, serve both wholesale and retail customers.

Belcher Oil Company units market fuel oil and other products in Gulf of Mexico and East Coast states through terminals such as this facility at Fort Lauderdale, Florida.

RETAIL GASOLINE MARKETING

Derby Refining markets branded gasoline through 565 service stations. Of these, 59 are owned and 153 leased by Derby, and 353 are owned by independent jobbers and dealers. The stations are located in 12 midwestern states, mostly in Kansas, Missouri, Nebraska, Iowa and Illinois.

Historically, Derby has sold more refined products than its refinery can produce. Upon completion of Derby's $55 million upgrading of its refinery facilities next year, the company will be able to supply a larger percentage of product sales from its refinery.

TOSCO CORPORATION

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 2,387,241,000	$ 3,431,491,000
Earnings	46,096,000	22,579,000
Number of Employees	3,055	3,170
Return on Average Shareholder's Equity	20.0%	9.0%
United States Motor Gasoline Sales as a Percentage of Tosco Worldwide Sales (by Barrels)	65.0%	63.9%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	None	None
On Shore Oil Rigs	—	1
Refineries	11	1
U.S. Gasoline Pumps	None	None
Gasoline Station Employees	None	None
Coal Mines	None	None
Corporate Citizenship	None	1
Research	—	1
Background of Chief Executive	Oil Manufacturing	Oil Manufacturing
Percentage of Company Stock Owned by Corporate Officers and Directors	9.1%	9.4%
Number of Pages in Annual Report	48	41
Number of Pages Devoted to Gasoline Marketing	None	¼

Number of Tosco Gasoline Stations in the United States:

12-31-81	0
12-31-80	46
12-31-79	102
12-31-76	N/A
12-31-71	N/A

Distribution of Petroleum Products

Tosco sells unbranded refined petroleum products to wholesale purchasers. Substantially all of Tosco's sales of gasoline and distillates are made to small and large independent retailers, who compete in price with major oil company retail dealers. Other petroleum products are generally sold directly to ultimate industrial users of such products.

Excerpt from 10K, page 5

What the Tosco Annual Report Says About Gasoline Marketing:

Finally, Tosco's marketing strategy has led it to a strong, competitive wholesale position in sunbelt markets, which continue to be the nation's strongest motor fuels markets.

Strategic plant selection and prudent supply and market planning have produced a unique, independent refining system which is competitive in the short term, and is positioned to prosper as the present economic turbulence abates.

Page 5

Corporate Profile

Tosco Corporation is engaged in the refining and wholesale marketing of petroleum products, and in the development and commercial application of proprietary technologies to refine clean fuels from oil shale, coal and other solid materials.

Page 1

Excerpt from the Annual Report of Tosco Corporation, December 31, 1981

KERR-McGEE CORPORATION

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 3,477,900,000	$ 3,826,400,000
Earnings	182,200,000	211,100,000
Number of Employees	11,286	11,202
Return on Average Shareholder's Equity	13.6%	14.8%
United States Motor Gasoline Sales as a Percentage of Kerr-McGee Worldwide Sales (by Barrels)	40.5%	52.9%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	6	3
On Shore Oil Rigs	—	2
Refineries	2	1
U.S. Gasoline Pumps	None	1
Gasoline Station Employees	None	None
Coal Mines	1	2
Corporate Citizenship	None	1
Research	—	None
Background of Chief Executive	Geologist	Geologist
Percentage of Company Stock Owned by Corporate Officers and Directors	3.88%	3.80%
Number of Pages in Annual Report	60	57
Number of Pages Devoted to Gasoline Marketing	1	1-2/3

Number of Kerr-McGee Gasoline Stations in the United States:

12-31-81	1,519
12-31-80	1,452
12-31-79	1,513
12-31-76	N/A
12-31-71	N/A

Marketing and Product Distribution

At the close of 1981, 1,519 branded service stations located primarily in the Midwestern and Southwestern parts of the country were operating under the Kerr-McGee or Deep Rock brands. Of this number, 368 were owned in fee or held under long-term lease by the company. The remaining 1,151 branded stations were controlled by independent jobbers operating under branded sales contracts. A new salary operated service station design concept has been introduced in the retail marketing operations. Five units employing this high volume, funnel exit, self-service station design are now operating. Present plans call for the addition of more of these new design, high volume, salary operated stations in selected metropolitan markets. In addition, the company owned or leased 100 retail service stations, and a 50% owned affiliate (over which the company has no operational control) owned or leased 63 more stations, operating under brand names other than Kerr-McGee or Deep Rock in the Southwestern and Southeastern parts of the country.

During 1981, industry wide realignment of marketing territories to concentrate sales around supply sources resulted in withdrawals of some branded competition from the company's markets. The company was able to add to its branded operations some of the more successful independent jobbers and dealers released due to market withdrawal of other suppliers, increasing the number of stations in operation over 1980.

Excerpt from 10K, page 12

What the Kerr-McGee Annual Report Says About Gasoline Marketing:

Corporate Profile

Kerr-McGee Corporation engages in the exploration for and processing of natural resources. Since the company's founding in 1929, Kerr-McGee has acquired substantial reserves of oil, natural gas, uranium, coal, other minerals, and forest lands.

The company's principal business is the discovery and production of oil and natural gas. Kerr-McGee also provides offshore contract drilling services around the world.

Other activities include refining and marketing petroleum; exploring for, mining, and processing coal and uranium; and producing chemicals from company-owned mineral reserves. Kerr-McGee owns timberlands, processes forest products, and funds an innovative research and development program.

Headquartered in Oklahoma City, the company has achieved a strong record of growth in the energy field. Kerr-McGee will continue to build its reserves of natural resources and aggressively develop those resources into products needed by the nation. The skills and dedication of more than 11,000 employees make possible this achievement.

Page 1

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oil stocks to higher-valued unleaded gasoline and distillates and to utilize high-sulfur crude oil.

A new service station design has been introduced in retail marketing. Self-service combined with a traffic pattern that channels cars past a single cashier have produced high volumes at the five stations now operating with the new design.

For the first half of 1982, weak demand is expected to keep market conditions very competitive and to depress profit margins.

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Refining and Marketing

(Barrels per Day)	1981	1980
Refining capacity:		
Crude oil distillation	**181,000**	181,000
Downstream processing units*	**154,800**	154,800
Total refinery runs	**113,659**	113,183
Crude oil processed	**110,574**	112,726
Refined products produced:		
Gasoline	**60,847**	48,868
Distillate	**33,468**	33,756
Residual fuel oil	**9,363**	7,684
Other	**17,354**	23,629
Total	**121,032**	113,937
Refined products sales:**		
Gasoline	**79,380**	67,917
Distillate	**39,679**	53,807
Residual fuel oil	**7,972**	9,038
Other	**22,953**	36,875
Total	**149,984**	167,637

*Represents output of crude oil distillation that can be processed in subsequent refining steps. This is the basis used by the American Petroleum Institute to define U.S. refining capacity.

**Includes commission sales.

Kerr-McGee Refining Corporation operates three petroleum refineries located at Corpus Christi, Texas; Wynnewood, Okla.; and Cotton Valley, La. Crude oil is supplied from company production and supplemented by outside purchases on contract and spot bases. All refineries process domestic crude oil. The Wynnewood refinery also processes foreign crude oil delivered via the Texoma pipeline from the Gulf Coast, and the Corpus Christi refinery processes foreign crude oil received by tanker.

Kerr-McGee markets refined petroleum products through wholesale terminals and retail service stations. In addition, Cato Oil and Grease Co., a subsidiary, manufactures a complete line of lubricating oils, greases, and petroleum specialty products that are marketed throughout the U.S.

Page 14

The company markets gasoline through 1,519 branded service stations. Of these, 1,406 stations are supplied through independent branded jobbers, and the remainder are operated by Kerr-McGee and its branded dealers. The company also operates 100 service stations under private brand names.

In 1981, Kerr-McGee refinery runs averaged 113,659 barrels of oil per day, approximately the same as in 1980.

Refined product sales for Kerr-McGee Refining and its subsidiaries in 1981 totaled 149,984 barrels per day, 17,653 barrels per day below 1980. Triangle Refineries, Inc., sold 75,512 barrels of refined products per day, 9% above 1980. Triangle, a wholly owned subsidiary, markets gasoline and distillates through its 14 terminals located on major pipelines and waterways. Royal Petroleum Corporation, a New York-based subsidiary, sold 11,628 barrels per day of refined products during 1981, 25% below 1980. Royal markets distillates and other products on the East Coast of the United States. Sales of Cato Oil and Grease Co. increased 13% in 1981.

Operating profits from Kerr-McGee's refining and marketing operations decreased in 1981 compared with 1980. For the refining industry, product demand was down 5% from the previous year. The decline resulted from consumers' conservation, use of alternative fuels, and a weak economy. Reduced demand led to weak markets, low refinery utilization rates, and lower profit margins.

Over the past few years, major modification programs have been completed at the Corpus Christi and Wynnewood refineries. The modifications enable the refineries to meet changed market conditions and the lead phase-down requirements mandated by the U.S. Environmental Protection Agency. The new facilities permit the refineries to convert residual fuel

A Kerr-McGee petroleum refinery lights up the night at Wynnewood, Okla. One of three company refineries, the facility processes crude oil supplied by Kerr-McGee production, as well as crude oil purchased on contract and spot bases. Above: At Cato Oil and Grease Co., an employee rolls labels onto freshly painted drums. The containers will be filled with gear lubricant, one of 500 petroleum products that Cato manufactures. Opposite, below: At a Kerr-McGee service station, drivers pump gasoline into their cars and then follow an exit path that leads vehicles past a single cashier. This new service station design, used at five locations, is producing high sales volumes.

AMERICAN PETROFINA, INCORPORATED

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 2,098,464,000	$ 2,504,038,000
Earnings	104,279,000	74,140,000
Number of Employees	2,742	2,750
Return on Average Shareholder's Equity	22.4%	14.2%
United States Motor Gasoline Sales as a Percentage of FINA Worldwide Sales (by Barrels)	44.0%	38.3%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	1	None
On Shore Oil Rigs	1	None
Refineries	1	1
U.S. Gasoline Pumps	1	1
Gasoline Station Employees	None	None
Coal Mines	None	None
Corporate Citizenship	None	None
Research	None	None
Background of Chief Executive	Lawyer	Lawyer
Percentage of Company Stock Owned by Corporate Officers and Directors	N/A	1.5%
Number of Pages in Annual Report	33	33
Number of Pages Devoted to Gasoline Marketing	2	2

Number of FINA Gasoline Stations in the United States:

12-31-81	4,014
12-31-80	3,852
12-31-79	4,144
12-31-76	5,046
12-31-71	N/A

The Company markets gasoline and other refined products through APCOT, under the Fina brand. Fina products are primarily sold through the Company's jobber organization of some 445 independent businessmen. The Company supplies 4,014 branded retail outlets, located in 19 states of the Mid-Continent, Southeastern and Southwestern regions. Approximately 91.5% of the gasoline produced by the Company reaches the market through these outlets.

Excerpt from 10K, Business, page 1

What the American Petrofina, Inc. Annual Report Says About Gasoline Marketing:

Marketing

The immediate lifting of Federal pricing and allocation controls in January 1981 particularly affected Marketing's operating results for the year. For a brief period, gasoline and other refined products prices rose swiftly, reflecting the sudden rise in crude oil prices. However, after reaching a peak early in the second quarter of the year, prices steadily declined as a growing surplus of products, particularly gasoline, developed. Industry efforts to equate supply with demand by lowering refinery operating rates could not counter the price decline.

Total U.S. demand for petroleum products in 1981 continued to decline, dropping 6.2% from the previous year. Gasoline deliveries were down 4.2%, while distillate and residual fuel oil use decreased 4.6% and 19.9%, respectively. The relatively high level of prices, strong interest in conservation and the nationwide recession continued to affect demand.

The Company's total sales of refined products declined by 12.7% from the previous year. Sales of gasoline and middle distillates decreased 10.6% and 12.7%, respectively, from 1980 levels. Asphalt and heavy oil sales dropped 18.8%, reflecting reduced production and diminished markets. Jet fuel sales, on the other hand, offered significant encouragement as they tripled from the Company's initial entry into this market in 1980.

The return to a free market within the wholesale and retail gasoline sector resulted in extremely competitive marketing tactics by year end. Many suppliers initiated realignments of their markets by withdrawing from areas of low representation and high costs. A considerable number of refiners offered price rebates and a host of special temporary allowances, bonuses and other inducements to stimulate product sales. By maintaining a high price for its products during this period, the Company lost volume to other marketers. In January 1982, the Company reversed its pricing stance, significantly lowering its prices to meet the increased competition and regain volume. The market's current instability is expected to continue through 1982 as the industry adjusts to the continuing decline in product demand.

With the lifting of controls, the Company began restructuring its branded jobber marketing program. During the year, the Company withdrew from several unprofitable and difficult-to-supply areas and expanded its market coverage to include Alabama, Mississippi and parts of Tennessee, Louisiana and the Carolinas. The Company's network of jobbers and service stations now extends throughout the entire "Sunbelt" region of the country. At the end of 1981, the Company marketed gasoline under the Fina brand through 445 jobbers in 19 southeast, southwest and midwest states. The total number of Fina branded service stations at year-end was 4,014, an increase of 162 from 1980.

The Company continued to dispose of unprofitable service stations and associated real estate. A total of 52 fee properties were sold at a gain in excess of $1 million. Another 92 stations were eliminated by cancellation or non-renewal of lease agreements. An important reduction in operating expenses will result from the elimination of these 144 properties.

As the competition in the market place grew more intense, the Company expanded its efforts to assist its jobbers in reducing their costs and in optimizing the profitability of their operations through training programs. In classrooms located in Arlington, Texas and in Atlanta, Georgia and at numerous travelling clinics the Company provided training and instruction for jobbers, dealers and mechanics in all phases of service station operations. These classes drew record numbers of jobbers and their employees.

In the downstream segments, the effect of deregulation was adverse. Although prices of refined products rose immediately to reflect the decontrolled cost of domestic crude oil, margins were not maintained. With the incentive gone to hold inventory for price appreciation under phased decontrol and with high interest rates adding to the cost of maintaining inventory, the industry reduced its stocks of refined products by some 46 million barrels during the year, the equivalent of approximately 3 days of national consumption. At the same time, deliveries of refined products in the United States were down 6.2% overall and, in the case of gasoline, by 4.2%, as an increasing percent of fuel-efficient vehicles, a sensitivity to higher prices and the continuing economic recession served to suppress demand. Refinery utilization dropped to 68.7% nationwide. The Company's Big Spring, Texas, refinery operated at 77.5% of capacity. The Port Arthur, Texas, refinery operated at 71.6% until mid-October when a major turnaround was undertaken. During such down-time, a new vacuum unit and additional gas compression at the catalytic cracking unit were installed.

Excerpt from the Annual Report of American Petrofina, Incorporated, December 31, 1981

A new Fina self-service station, truckstop, car wash and convenience store in Beaumont, Texas, built in 1981, is jointly owned by Maxi-Serv, Inc., a Fina jobber serving the Golden Triangle area in Southeast Texas, and the Company. A high volume unit, it represents the new trend in station construction.

Fina Marketing Area

TENNECO CORPORATION
YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 13,226,000,000	$ 15,462,000,000
Earnings	726,000,000	813,000,000
Number of Employees	106,000	103,000
Return on Average Shareholder's Equity	18.0%	16.3%
United States Motor Gasoline Sales as a Percentage of Tenneco Worldwide Sales (by Barrels)	N/A	N/A
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	2	4
On Shore Oil Rigs	—	4
Refineries	1	1
U.S. Gasoline Pumps	None	2
Gasoline Station Employees	None	None
Coal Mines	None	None
Corporate Citizenship	None	None
Research	—	None
Background of Chief Executive	Business Administration	Business Administration
Percentage of Company Stock Owned by Corporate Officers and Directors	17/100th of 1%	16/100th of 1%
Number of Pages in Annual Report	60	57
Number of Pages Devoted to Gasoline Marketing	1/3	2

Number of Tenneco Gasoline Stations in the United States:

12-31-81	484
12-31-80	480
12-31-79	N/A
12-31-76	N/A
12-31-71	N/A

Tenneco's gasoline and other refined petroleum products are marketed principally in the southeastern and Atlantic Seaboard areas of the United States through approximately 480 Tenneco-owned or leased service stations and through independent distributors. Other petroleum products, principally fuel oil, diesel oil, kerosene, aromatics and liquified petroleum gas, are sold at the refinery, or through petroleum products pipelines at terminals in which Tenneco has an interest. The principal brand names under which Tenneco products are marketed in the United States are "Tenneco", "Bay", "Direct", "U fill 'em" and "Red Diamond". Tenneco also distributes purchased refined oil products and petrochemicals in Western Europe.

Excerpt from 10K, Marketing, page 17

What the Tenneco Annual Report Says About Gasoline Marketing:

Income from Tenneco's oil processing and marketing and chemicals operations, before interest and federal income taxes, totaled $181 million in 1981 on net sales and operating revenues of $4.5 billion. In comparison with 1980, revenues increased, but income declined.

Tenneco Oil Processing and Marketing, an operating unit of Tenneco Oil Company, refines and markets petroleum products, extracts and markets natural gas liquids, operates a petrochemical plant and a contract drilling company, and will begin soda ash production in 1982.

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TENNECO OIL PROCESSING AND MARKETING

A decline in refining profit margins was the principal reason for a decline in operating income of Processing and Marketing.

Our response has been to reduce crude runs and cut inventories of crude oil and products to the lowest practicable level, while at the same time protecting our customers' supply.

An important 1981 development in the refining segment of our business is the heavy oil expansion project.

It is designed to eliminate, or at least greatly reduce, dependence on the spot market in order to meet our product demand. Historically, we have purchased about 30,000 barrels of refined products a day, mainly gasoline. Also, it will provide the flexibility to process economically a wider variety of crude oils, particularly the low-gravity, high-sulphur and high-metals crudes, which will be the most readily available.

The project will provide additional crude oil processing capability of about 30,000 barrels per day, raising refining capacity to near 130,000 barrels per day. Also to be installed are new and larger processing units to convert the heavier oils into lighter, higher-value products. Our plan is to proceed with all engineering and design of major equipment and to phase-in field construction to meet spending schedules.

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Marketing

The marketing segment of our business is in an excellent position to take advantage of growth opportunities, since our markets are primarily in the Sun Belt, where population growth will tend to offset the decline in gasoline consumption. Our retail gasoline market programs, incorporating self-service and convenience foods, are highly efficient and provide us a good competitive position.

A new retail marketing operation began in 1981 with the opening of our first truck-stop outlet in Valdosta, Ga. This program combines the best of what we have learned from our marketing experiences and from our competitors, namely a high-volume, self-service, cash-only operation which allows us to price very competitively with other truck stops.

The first few months of operation have been encouraging. Two more of these units began operation in late 1981 and four more are planned for 1982.

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Outlook

Like other refiners, we felt the impact of under-utilization of plant in 1981. Like other marketers, we felt the impact of reduced demand, oversupply, and price weakness. We are hopeful these problems will ease in 1982.

Page 20

Oil Processing and Marketing, Chemicals

The Processing and Marketing division entered the truck stop market during 1981. Self service operations are designed to attract truckers with lower prices, a full product line and easy-to-reach locations. Four more are scheduled to open during 1982.

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Business Profile

TENNECO OIL PROCESSING AND MARKETING
Houston, Texas 77001
TENNECO CHEMICALS
Piscataway, New Jersey 08854 / ALBRIGHT & WILSON
London, England

Financial Highlights ($ in millions):	1981	1980
Net sales and operating revenues	$4,542	$3,992
% of Tenneco total	29%	30%
Income (before interest and federal income taxes)	$ 181	$ 282
% of Tenneco total	9%	18%
Average net assets employed	$1,722	$1,507
Return on average net assets employed (pre interest and tax)	11%	19%
Capital expenditures	$ 345	$ 286
Oil Processing and Marketing:		
Daily refinery crude oil runs (barrels)	98,836	91,311
Daily refined product and petrochemical sales (barrels)	142,034	125,899
Service stations (owned or leased)	484	480
Number of Chemical Plants:		
United States	16	22
United Kingdom	17	17
Other countries	33	37
Number of Employees	18,223	18,761

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Tenneco's marketing program continues its successful combination of self service gasoline pumps and convenience food stores.

CROWN CENTRAL PETROLEUM COMPANY

YEAR ENDED DECEMBER 31

	1980	1981
Sales	$ 1,273,547,000	$ 1,502,043,000
Earnings	19,147,000	3,362,000
Number of Employees	1,600	1,656
Return on Average Shareholder's Equity	9.9%	1.7%
United States Motor Gasoline Sales as a Percentage of Crown Central Worldwide Sales (by Barrels)	73.3%	N/A

Annual Report Picture Survey:

No Pictures in Annual Report

Background of Chief Executive	Accounting	Accounting
Percentage of Company Stock Owned by Corporate Officers and Directors	52.97%	54.49%
Number of Pages in Annual Report	32	28
Number of Pages Devoted to Gasoline Marketing	2	1½

Number of Crown Central Gasoline Stations in the United States:

12-31-81	216
12-31-80	212
12-31-79	N/A
12-31-76	N/A
12-31-71	N/A

Marketing

The Company retails and/or wholesales finished petroleum products in Alabama, Florida, Georgia, Maryland, Mississippi, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia and Washington, D.C.

The Company markets its gasoline products at retail through 216 modern high volume service stations, of which 67 are leased to dealers and 149 are operated by the Company.

Excerpt from 10K, page 1-6

What the Crown Central Annual Report Says About Gasoline Marketing:

However, several decisions and events occurring during the year resulted in one-time charges to income that heavily impacted earnings. It is estimated that net income for the corporation, excluding such unusual charges, would have been approximately $17 million. Therefore, despite these decisions and other problems discussed below, the performance of the Company's major business operations, namely, refining and marketing, exploration and production, and insurance, was significantly better than indicated by the reported net income.

Page 2

Worldwide surplus of inventories and a reduction in demand for petroleum products have resulted in an extremely competitive marketplace. Until supply and demand return to more normal levels, as they eventually will, and until the economy recovers, we do not expect the petroleum industry to realize earnings levels which have been achieved in the recent past.

Page 3

Petroleum Products Division

In 1981 the Refining, Marketing, and Supply and Transportation divisions of Crown and of the industry operated in an environment that underwent numerous changes. In areas over which we had control or where we could react to externally influenced events, significant benefits were realized during 1981, which will improve future operations However, the changes brought about by uncontrollable external events were, in almost every instance, detrimental to Crown from an operating and financial standpoint and, in many cases, the effects are expected to continue well into 1982.

Page 4

Marketing

To meet competitive conditions that are causing changes in traditional retail gasoline sales methods, Crown successfully introduced split-serve (self-serve and full-serve) at our former full-serve stations in Maryland and Virginia, and in almost all cases there was an immediate improvement in sales volumes. Although Crown's total gasoline sales in 1981 declined by 1.3% compared with 1980, this was only about one-third of the percentage decrease experienced nationwide. Several innovative design and marketing concepts were developed during 1981 and will be introduced on a trial basis in 1982. In the meantime, new service station construction has been temporarily slowed while our plans in this area of the business are reassessed. Selected Crown stations are now selling motor diesel fuel, and increased emphasis has been placed on sales of distillate fuel oils through our terminal facilities.

Crown will continue to emphasize efficiency in its downstream operations, and a number of projects directed at cost savings, improved profitability, and product diversification are well underway or in initial phases of development. Our goals for 1982 include increasing the ability to process crudes that are lower in cost without sacrificing product quality or yield, upgrading the recovery of higher-valued products from refinery operations, continuing our successful efforts to reduce energy requirements, improving the profitability of our service station operations, and broadening our marketing efforts to other profitable lines of business. Although competition will be severe and margins will be minimal while supply continues to exceed demand, we intend to remain competitive and to position your Company to benefit from the more balanced supply/demand situation that will return.

Page 5

Excerpt from the Annual Report of Crown Central, December 31, 1981

Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations

The continued growth in total revenues during the past three years was due primarily to increased selling prices. The average unit price of products sold increased 16% from 1980 to 1981 and 39% from 1979 to 1980, reflecting the partial passthrough to the consumer of higher costs, principally for crude oil and other raw materials. Although there was a slight increase in sales volumes in 1981 over 1980, total volumes sold remained approximately 10% below the 1979 levels. Because of extremely competitive market conditions, as well as more conservative driving habits and greater vehicle efficiency, gasoline sales volumes decreased 17% from 1979 to 1981. Crown's 1981 distillate fuel sales increased 10% over the 1980 levels as a result of greater production.

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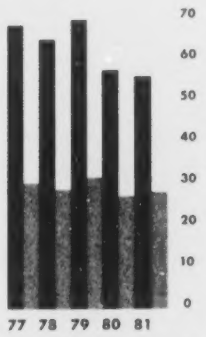
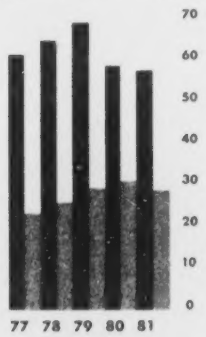
Competitive conditions during 1981 have prevented the Company from passing through all of its increased costs, thereby reducing margins and net income for 1981. The volume of products sold by the Company represents a relatively small portion of the total of such products consumed in the Company's marketing areas, and thus the marketing and pricing policies of its competitors do have an effect on the Company's earnings. Additionally, as Crown continues to expand its domestic exploration and production activities, the costs of finding reserves have a direct impact on earnings in a particular year.



Gasoline and Distillate Fuel Production—Bbls. Per Day
(In Thousands)
Gasoline
Distillate Fuel



Gasoline Sales—Bbls. Per Day
(In Thousands)
Total
Multipump

Page 5

Crown Central Petroleum Corporation is an independent producer, refiner and marketer of petroleum products. The Company owns and operates a 100,000 barrel per day refinery on the Houston Ship Channel in Pasadena, Texas. The Company's exploration and production activities are confined almost exclusively to the United States and its refined products are marketed, through wholesale and retail distribution, in the Eastern and Southeastern part of the country.

Back cover

Excerpt from the Annual Report of Crown Central, December 31, 1981

TESORO PETROLEUM COMPANY

YEAR ENDED SEPTEMBER 30

	1980	1981
Sales	$ 3,588,400,000	$ 3,069,600,000
Earnings	104,000,000	80,200,000
Number of Employees	3,500	3,800
Return on Average Shareholder's Equity	32.0%	19.6%
United States Motor Gasoline Sales as a Percentage of Tesoro Worldwide Sales (by Barrels)	35.0%	26.1%
Annual Report Picture Survey:		
Pictures of:		
Off Shore Oil Rigs	2	None
On Shore Oil Rigs	—	5
Refineries	4	3
U.S. Gasoline Pumps	4	3
Gasoline Station Employees	None	None
Coal Mines	None	None
Corporate Citizenship	None	None
Research	—	None
Background of Chief Executive	Chemical Engineering	Chemical Engineering
Percentage of Company Stock Owned by Corporate Officers and Directors	3.40%	3.16%
Number of Pages in Annual Report	36	41
Number of Pages Devoted to Gasoline Marketing	2	2¼

Number of Tesoro Gasoline Stations in the United States:

12-31-81	108
12-31-80	189
12-31-79	184
12-31-76	225
12-31-71	None

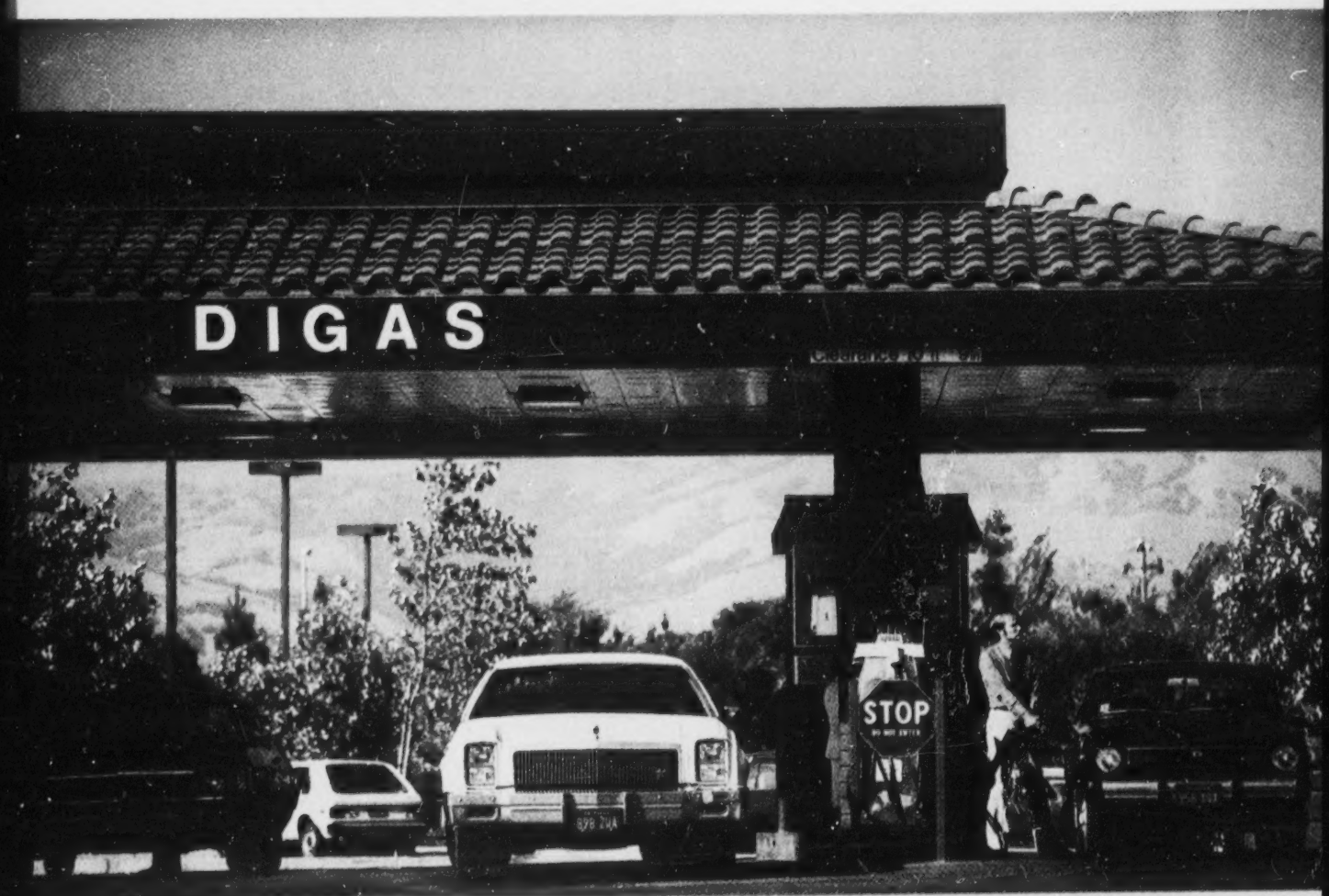
Marketing

The Company sells petroleum products at wholesale and retail in the United States. Approximately 38% of such sales were supplied by the Company's refineries during fiscal 1981.

The Company sells gasoline and related petroleum products at wholesale to distributors and independent gasoline stations, and at retail principally through its subsidiary, Tesoro Gasoline Marketing Company, doing business as "Digas," which presently operates 108 high volume retail gasoline stations, of which the majority are located in California. Eighty (80) of such Digas stations are located at Gemco and Memco Stores owned by Lucky Stores, Inc.

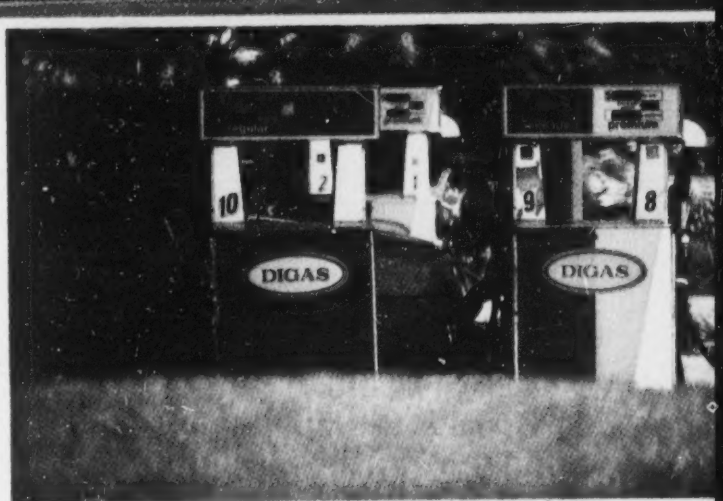
Excerpt from 10K, page 8

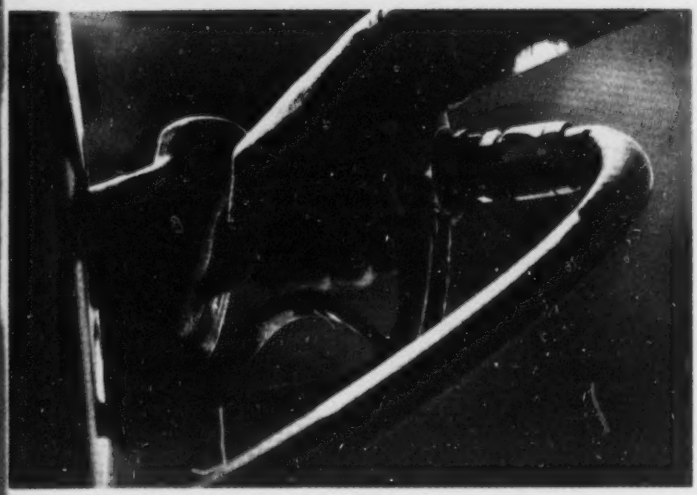
Sales volumes averaged approximately 152,000 gallons per month at each service station in the year just ended.



ABOVE: Tesoro Gasoline Marketing Company self-service station, Los Angeles, California.
RIGHT: Self-service computerized pumps, Los Angeles, California.

OPPOSITE PAGE: Tesoro Gasoline Marketing Company currently operates 108 retail service stations.





Operating profit for the fiscal year ended September 30, 1981, totaled $65.1 million. The elimination of government price controls in the second fiscal quarter initially resulted in depressed refining margins, as rising crude oil costs outpaced refined-product price increases. Economic adjustments to the new environment were made however, and refining margins began to improve in the third and fourth fiscal quarters.

Refinery runs at the Company's plants in fiscal 1981 were as shown in the following table:

Crude Oil Refining	**Fiscal 1981**	Fiscal 1980	Fiscal 1979
Year-end Capacity (b/d)			
Kenai, Alaska	**48,500**	48,500	48,500
Carrizo Springs, Texas	**26,100**	26,100	26,100
Total	**74,600**	74,600	74,600
Throughput (b/d)			
Kenai, Alaska	**42,636**	42,514	42,768
Carrizo Springs, Texas	**6,893**	10,929	13,781
Processing in Others' Refineries	**—**	1,257	5,000
Total	**49,529**	54,700	61,549

It is noteworthy that Tesoro's refining and marketing results outperformed many domestic refiners during the past fiscal year. This performance was due in large measure to the location of the Company's two refineries with respect to both crude oil sources and refined-products markets. By maintaining refinery configurations and operating levels matched to refined-product demands in the immediate market areas, Tesoro has been able to establish competitive positions that allow it to market effectively, even during depressed periods.

The construction of a new atmospheric gas oil hydrocracker and the capacity doubling of an existing naphtha reformer at the Kenai, Alaska refinery were completed in January 1981 in an exceptionally short time of 16 months. The hydrocracker has been operating at an average rate of 95% of maximum capacity, with product yields more than design estimates. As a result, production of unleaded motor gasoline has increased by over 3,000 barrels per day and aviation turbine fuel by more than 4,000 barrels per day. Concurrently, lower valued residual fuel oil production has been reduced to approximately 30% of the total product yield.

Construction of one of two planned 300,000-barrel crude oil storage tanks at the Kenai refinery was completed in September 1981. The second is scheduled to be finished shortly. This additional storage will allow the refinery to optimize the mix of Cook Inlet, Alaskan North Slope, and Indonesian crude oils, while reducing transportation costs by allowing delivery of crude oil in larger shipments.

Operations at the Carrizo Springs, Texas refinery were set to maximize the use of local crude oils and to provide refined products to nearby markets. The refinery's transportation cost advantage, coupled with a reduction in labor and other operating costs, resulted in profitable operations during fiscal 1981.

Refined Products Marketing	**Fiscal 1981**	Fiscal 1980	Fiscal 1979
Refined Products Sales (b/d)			
Gasoline	**34,585**	47,702	67,098
Jet Fuel	**11,394**	12,941	10,816
Other Distillates	**59,187**	33,401	39,832
Fuel Oil	**23,742**	43,828	37,040
Total	**132,227**	137,872	154,786
Number of Retail Outlets			
Tesoro Alaska[1]	**75**	78	78
Tesoro Gasoline Marketing	**108**	108	103
Other	**3**	3	3
Total	**186**	189	184

[1] *Includes branded distributors.*

Tesoro Gasoline Marketing Company, the primary retail marketing entity of the Company, operates 108 retail service stations, of which 81 are located in California, the majority of which are affiliated with GEMCO and MEMCO discount centers owned by Lucky Stores, Inc. Four new stations were opened in fiscal 1981, and currently two new units are under construction. Sales volumes averaged approximately 152,000 gallons per month per station in the year just ended, of which diesel fuel sales represented 2.1% of the total. Because of the growing demand for auto diesel, the Company's program to make this product available was extended to 27 stations. In addition, a new, higher octane unleaded gasoline was introduced at six stations to capture a market share of the growing demand for this product.

WHAT DO THE 25 LARGEST OIL COMPANIES HAVE TO SAY

Company	# of Stations	Background of Chief Officer	Accountants
1. Exxon	20,585	Chem. Engineering	Price Waterhouse
2. Standard Oil of Calif.	11,586	Chem. Engineering	Price Waterhouse
3. Shell Oil Co.	13,700	Geologist	Price Waterhouse
4. Standard Oil Co. of Indiana (Amoco)	20,100	Chem. Engineering	Price Waterhouse
5. Texaco	21,000	Chem. Engineering	Arthur Anderson
6. Mobil	16,564	Accounting	Arthur Young & Co.
7. Gulf Oil Company	15,277	Chem. Engineering	Coopers & Lybrand
8. Atlantic Richfield	7,122	Finance	Coopers & Lybrand
9. Marathon Oil Company	2,146	Petroleum Engineering	Ernst & Whinney
10. Union Oil Co. of Calif.	12,500	Chem. Engineering	Coopers & Lybrand
11. Dupont/Conoco	5,708	N/A	Price Waterhouse
12. Ashland Oil	2,200	Chem. Engineering	Ernst & Whinney
13. Standard Oil Co. of Ohio (Sohio)	2,300	Engineering & Finance	Ernst & Whinney
14. Sun Co.	8,400	Chem. Engineering	Coopers & Lybrand
15. Phillips Petroleum Co.	13,900	Chem. Engineering & Refining	Arthur Young & Co.
16. Cities Service Co.	5,784	Engineering	Arthur Young & Co.
17. Union Pacific-Champlin	863	Geologist	Deloitte Haskins & Sells
18. Getty Oil Co.	5,071	Business Admin.	Arthur Anderson
19. Coastal Corporation	565	Mechanical	Touche Ross & Co.
20. Tosco Corp.	None	Chem; Oil Manufacturing; Engineering	Coopers & Lybrand
21. Kerr-McGee	1,519	Geologist	Arthur Anderson & Co.
22. American Petrofina	4,014	Lawyer	Peat, Marwick & Mitchell
23. Tenneco	484	Business Admin.	Arthur Anderson & Co.
24. Crown Central	216	Accounting	Ernst & Whinney
25. Tesoro	108	Chem. Engineering	Touche Ross & Co.
Totals	191,712		
Averages			

on the Companies in:

ABOUT GASOLINE MARKETING IN 1982?

# Pages in Annual Report	Pages Devoted to Gasoline Marketing	Percentage of Company Stock Owned by Officers & Directors	Average Return on Shareholders Equity in 1981
52	2/3	1/10th of 1%	20.6%
53	1-1/3	1/5th of 1%	20.0%
67	5	34/100th of 1%	21.0%
53	2	65/100th of 1%	19.2%
69	1/3	27/100th of 1%	17.6%
53	1/3	N/A	17.6%
61	3	56/100th of 1%	12.5%
61	4	46/100th of 1%	20.8%
	1/2	63/100th of 1%	16.6%
41	3/4	64/100th of 1%	20.8%
124	1	N/A	N/A
65	1-1/4	2.28%	6.3%
56	1-2/3	N/A	31.0%
65	2	5.0%	21.5%
77	1-1/3	8.3%	16.9%
56	1-1/4	50/100th of 1%	Loss
50	1/2	1.19%	N/A
81	1-1/2	50.68%	18.0%
53	2-1/2	8.1%	Loss
41	1/4	9.4%	9.0%
57	1-2/3	3.80%	14.8%
33	2	1.5%	14.2%
57	2	16/100th of 1%	16.3%
28	1-1/2	52.49%	1.7%
41	2-1/4	3.16%	19.6%
1,394	40-1/3 pgs.		
57	1-3/5 pgs.		

WHAT THE COMPANIES SAY: Their Own Statements

This section includes the letter that we sent to each company and their replies. Their responses are reproduced exactly as we received them, except in the cases in which we were expected to extract information from another publication. In that case, we extracted the applicable material on gasoline marketing.

Responses were received from:

Exxon
Chevron
Shell
Texaco
Mobil
Arco
Marathon
Union
Conoco/Dupont
Ashland
Phillips
Getty
Tosco
Tenneco
Crown Central

GASOLINE MARKETING SURVEY
P.O. Box 886
Benicia, Ca. 94510
(707) 745-6691

August 27, 1982

Mr. R.C. Kiddoo
Marketing V.P.
Exxon Company, USA
Box 2180
Houston, Texas 77001

Dear Mr. Kiddoo:

We are in the process of writing our second annual report entitled "What Do the Top 25 Oil Companies Say About Gasoline Marketing?" The report features material on gasoline marketing from the annual reports of the 25 largest oil refiners in the United States. Since the Exxon Company, USA Annual Report has little to say about gasoline marketing, we'd like to include a statement from the Exxon Company, USA Marketing Department that will give a better description of Exxon Company, USA's marketing history, strategy, structure, and goals.

Your submission should be not more than two pages in length. We agree to reproduce your material exactly as submitted without any changes. We need to receive your material by September 15, 1982, because our deadline at the printer is October 1, 1982.

If you are unable to give us any information, we'd appreciate notification. If you are not the person to contact, please tell us whom we should contact.

We also publish the Dollars Per Day Survey of the Small Food Store Industry. We have enclosed a copy of the 11th Annual Survey, which was released in January 1982.

We are writing the 25 largest refining companies and will include material from each of these companies in the report. We'll send you a copy of the completed report upon publication.

Yours very truly,

John F. Roscoe

JFR:klg

Enclosure

EXXON COMPANY, U.S.A.
POST OFFICE BOX 2180 · HOUSTON, TEXAS 77001

MARKETING DEPARTMENT
R.C. KIDDOO
VICE PRESIDENT

September 20, 1982

Mr. John F. Roscoe
Gasoline Marketing Survey
P.O. Box 886
Benicia, California 94510

Dear Mr. Roscoe:

In response to your letter of August 27, 1982, we have enclosed information that should be helpful in providing you some insight into Exxon's outlook for gasoline marketing in the 1980's.

Attached is a copy of the first quarter, 1982 issue of Exxon USA, a magazine that is directed principally at Exxon exmployees in the U.S. Please refer to pp. 22-26 for the article entitled "Retail Gasoline Marketing in the Eighties." It goes into some depth as to what we perceive to be the challenges in retail gasoline marketing throughout this decade and our current thoughts on meeting these challenges. Permission is granted to reprint this article, in part or in whole, in your survey publication, "What Do The Top 25 Oil Companies Say About Gasoline Marketing?"

We will appreciate a copy of your survey when it is issued.

Sincerely,

RCK:JES:dms
Attachment

old ball, new game

Retail gasoline marketing in the eighties

Exxon's marketers and operators of the company's retail stores gear up to meet the challenges of the '80's.

TIMES CHANGE. Doctors don't make house calls anymore. Supermarket checkouts are computerized. And that fully-loaded Cadillac Fleetwood that cost about $4,000 back in the '50s is at least $21,000 now.

But for the last 30 years, the corner service station has stayed pretty much the same.

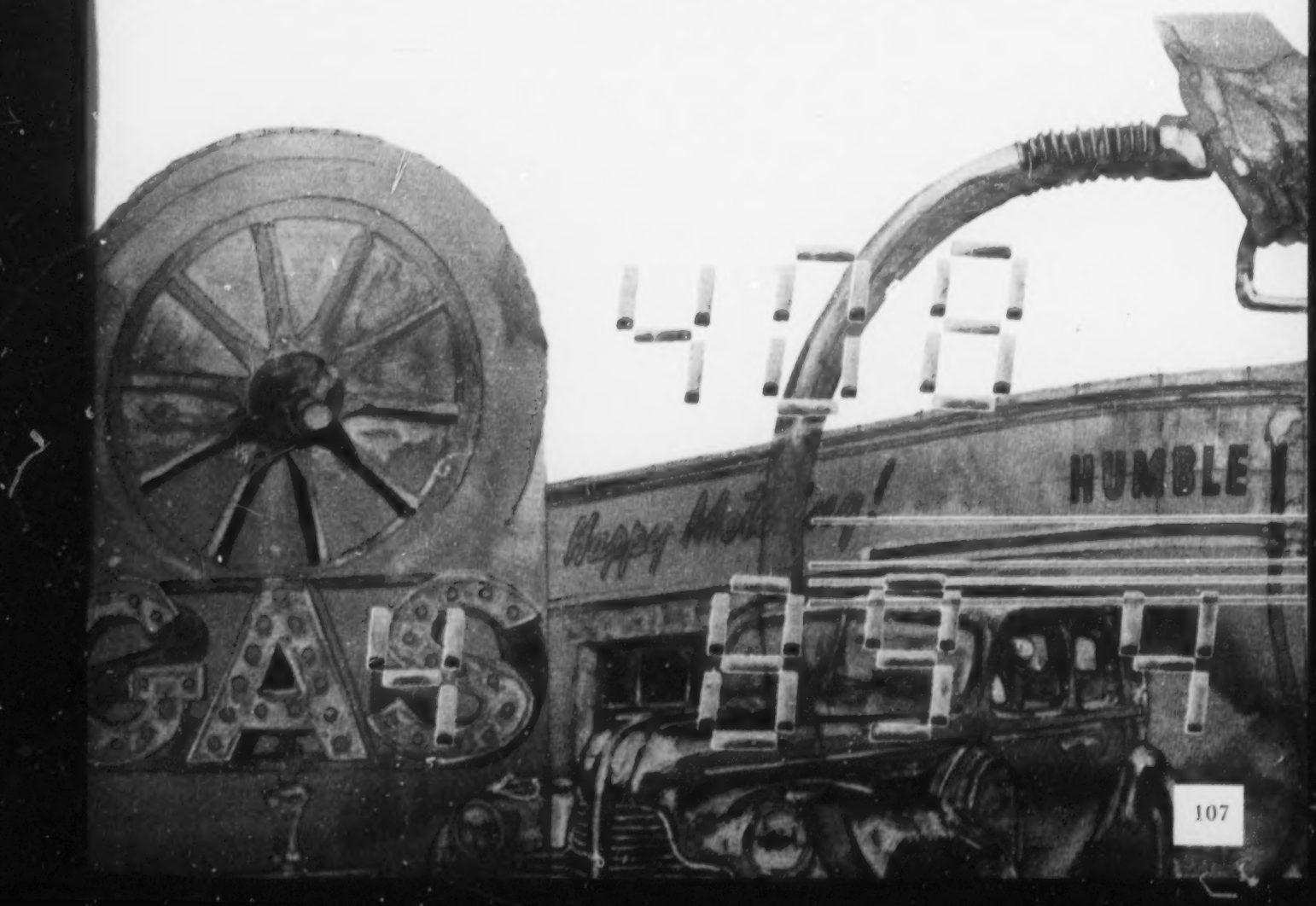
There've been updates in building designs, of course, and advertising and product offerings have kept pace with the times. But on the whole, a service station today is still a lot like a service station of the 1950s.

But not for long. The decade of the Eighties will see Exxon's Retail Marketing Department completely revamp its "service station" trade, inside and out.

Why? "Basically, because customers have changed," says R.C. Kiddoo, Exxon's vice president for marketing. Back in the '50s, and even through most of the '70s, American motorists concentrated all their car care purchases at one place: the service station. Brand loyalty was important to them, as was the convenience of having someone else pump their gasoline, change their motor oil, and fix their flats. A penny or two of price difference between the products of their favorite service station and of the one down the block that didn't offer such services didn't make much difference then.

It does now. Studies show that as oil shortages and inflation push prices up, consumers become more — not less — concerned about price differences of a few cents. They learn to pump their own gasoline, change their own oil, and even do minor repair jobs. They diversify their buying habits, shopping at cut-rate stations, buying oil at supermarkets, and choosing air filters from discount stores.

In addition to those changes in personal buying habits, there's been another change in the United States: gasoline consumption has declined sig-



nificantly since 1979. In 1980 alone, gasoline consumption dropped 6 percent from the year before; 1981 preliminary figures show a decline of 4.2 percent. People in the '80s plan their trips more carefully, take buses or car pools to work, and buy cars that deliver higher mileage than in earlier decades. Indications are that the decline in consumption of gasoline will continue at a rate of about 2.5 percent a year for the rest of the decade. That's healthy for America, as it eases the nation's dependence on foreign oil. But what about those in the retail gasoline business? Coupled with changes in buying habits for nongasoline items, does this mean a dead-end street for the operators of service stations?

Not if service station operators learn to compete successfully on all levels of the automotive-care market.

While that may seem a tall order, Exxon's retail marketing specialists have developed a plan for modernizing, economizing, and ensuring flexibility in the retail end of their business. Their objective: to reawaken customer conviction that an Exxon station is the place to go for all car service needs.

The most obvious changes will come in the modernization of station design. Many stations will be extensively remodeled or rebuilt entirely over a period of six years.

But the modernizations will mean more than just a face-lift. They mark a new approach to marketing. Designs will permit greater flexibility in meeting the changing needs of customers. For example, the new stations will feature:

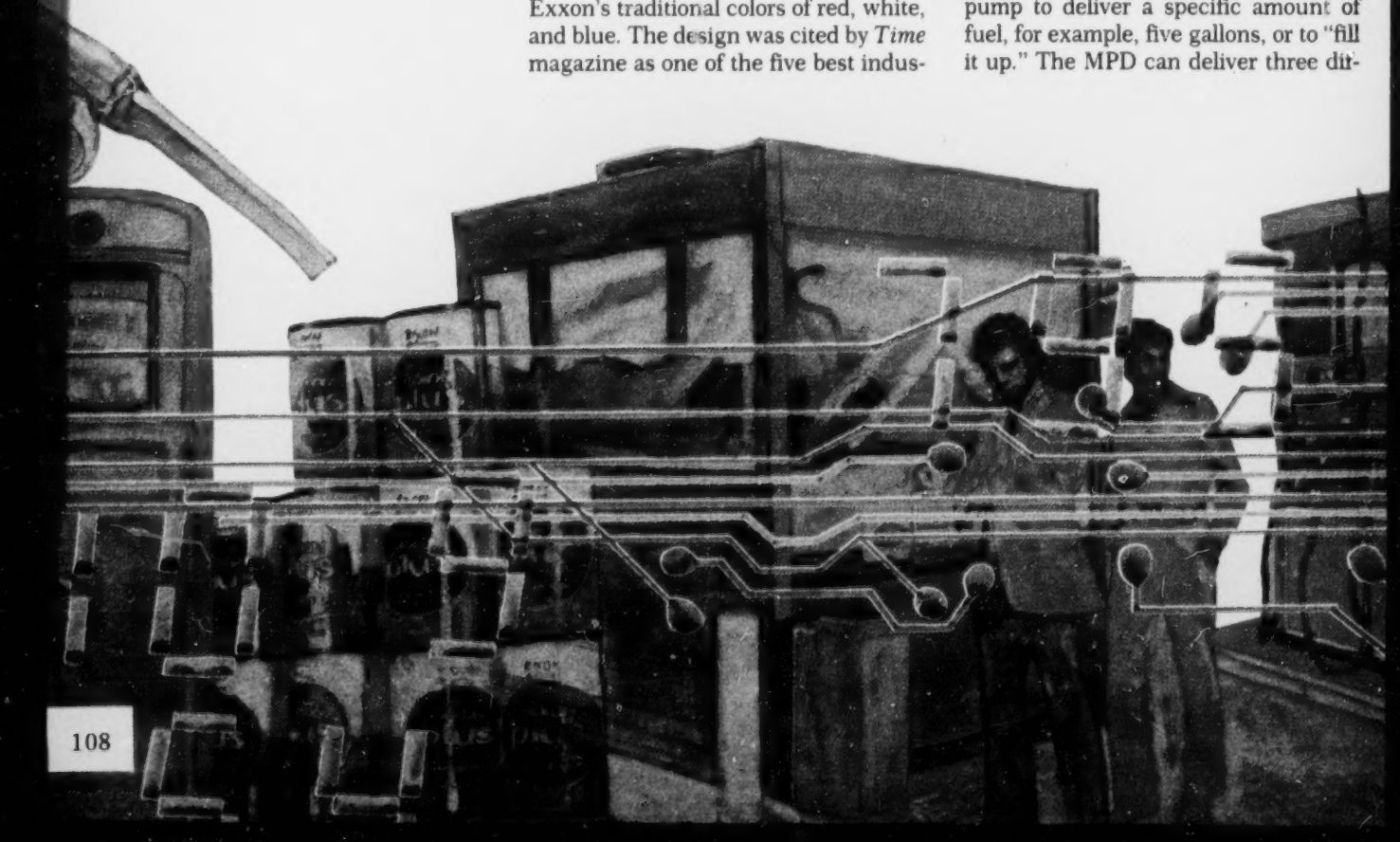
- Energy-saving modifications to hold the lid on operating costs.
- A new "smart" electronic gasoline pump, a boon to customers who prefer to fill their own tanks.
- More efficient pump-island layouts, enabling customers to enter and leave the station more easily and safely.
- More attractive designs that will convey a unified image so that customers may readily identify Exxon stations wherever they might be.

The new station design concepts were developed by the nationally recognized industrial design firm of Bass/Yager. A prototype station was built in Dallas, Tex., in 1981. It features simple, uncluttered lines with earth tones providing a contrasting background to Exxon's traditional colors of red, white, and blue. The design was cited by *Time* magazine as one of the five best industrial designs to be introduced during 1981 in the United States. According to *Time's* critics, "All elements including architecture, graphics, and gasoline pumps are integrated into one quietly assertive unit that should help calm America's roadside clutter."

Experts predict the new stations will consume 20 percent less energy than the ones they replace. Walls and ceilings will be insulated, of course, but station bay doors — made to Exxon's specifications — will also be insulated for added savings. Cashier kiosks will incorporate a double glazing system in windows for energy-efficient temperature control in both summer and winter.

Station lighting, also, will be more efficient. Instead of trying to bathe the entire facility in artificial sunshine, lights will be placed only where studies show they are truly needed so as to minimize the number of lamps required. On pump islands and in service areas, high-output, low-energy metal halide lamps will be used.

Customers should like the new MPD, or multiple product dispenser, which is to be a feature of the pump islands. This "smart" electronic pump makes self-service easy. A customer, with the punch of a button, can instruct the pump to deliver a specific amount of fuel, for example, five gallons, or to "fill it up." The MPD can deliver three dif-



ferent fuels on command through six individual hoses. Using two electronic computers, the pump will not only be able to calculate price per gallon for each product dispensed, but will be able to compute discounts for cash transactions where these are available. Dealers will further appreciate the pump's ability to keep detailed sales and inventory records, which in turn, will enable them to reduce bookkeeping costs. Likewise, should the United States ever embrace the metric system, the MPD pumps can be switched easily to record volumes in liters without expensive modification.

Designers have modernized station driveway layouts to improve the ease with which motorists can gain access to pumps. Traditionally, pumps were placed in rows alongside a driveway; a car stopping at the first pump would block access to the next. Now, pumps will be grouped under a free-standing canopy so that a motorist will have access to any available pump. Some stations will have a central kiosk where customers can pay after self-service. While the proportion of self-service pumps will be increased overall, full-service will still be offered at many stations.

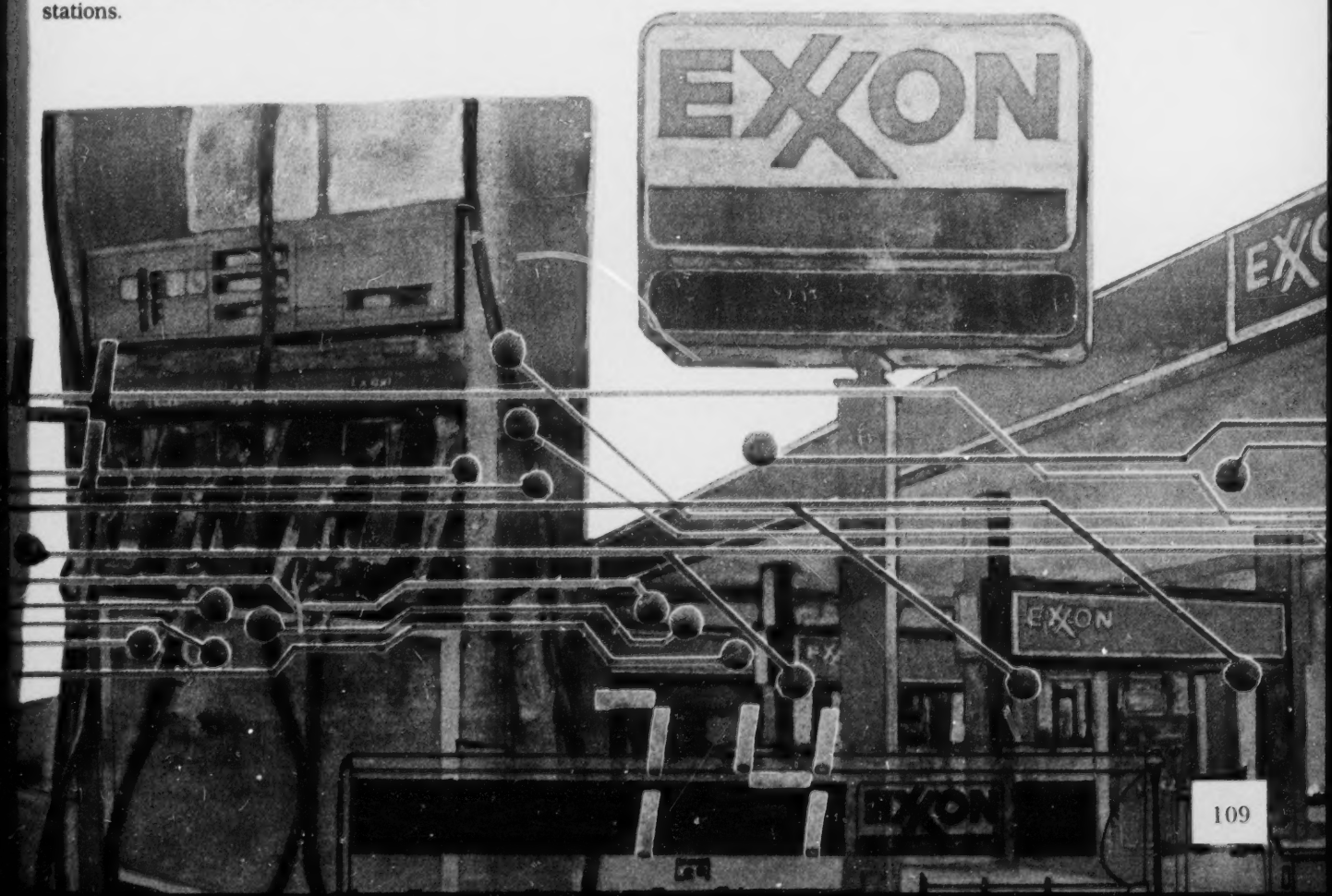
Where office space and service bays were once part of an integral unit, new designs will provide more of a physical separation.

"The sale of gasoline and the servicing of cars are really two distinct businesses," explains Jack Sallman, Exxon's retail practices coordinator. "As gasoline consumption declines, the automotive repair business will become more important to a station's survival." Sallman believes the new design will help dealers run each part of their two businesses more efficiently, without one getting in the way of the other. He points out that the use of self-service gives dealers more time to devote to the mechanical servicing of cars. "That's important," he says, "because economic conditions point to the probability of significant increases in the potential for mechanical work for service stations in the 80s." Cars are getting older. Owners keep cars longer. New cars are becoming technically more sophisticated, harder for a motorist to repair on his own. Simultaneously, there are fewer car dealers and neighborhood garages where motorists can go for repairs and servicing. "This indicates a promising future for the repair business," Sallman believes.

To teach dealers how to build up the repair side of the service station business, Exxon has developed training programs that revolve around one basic concept: a reputation for excellence.

"It's a good reputation for a job well done that attracts people," Sallman points out. "Motorists don't pick a repair shop at random. They ask around, and go to a place someone recommends as reliable."

Central to that reputation will be a program for encouraging automotive mechanics to become "certified." Certification is granted in eight categories by the National Institute for Automotive Service Excellence (NIASE) in Washington, D.C. To earn certification in a particular area, mechanics must pass a difficult three-hour test. The test topics cover engine repair, automatic transmission, manual transmission and rear axle, front end, brakes, electrical systems, heating and air conditioning,



and engine tune-up.

Exxon's specialists in retail marketing encourage station mechanics to become certified in all categories, both to increase competency and to earn customer confidence. Exxon trainers conduct regular NIASE test preparation clinics for mechanics employed by Exxon dealers. The availability of this training has encouraged many mechanics to sign up for certification tests, and Exxon has been well represented at the exams, which are given each spring and fall in more than 250 cities across the country. This has helped Exxon to be among the leaders in the number of certified mechanics employed by dealers.

Other programs will help dealers improve their business skills. Classes in retailing, technical service clinics, product knowledge seminars, and financial management courses will enable dealers to offer a higher quality of service.

A theme repeated throughout these management training programs will be that of good customer relations. Forecasts suggest that the 1980s may well be a decade in which gasoline supplies will fluctuate between ample and tight. And when gasoline is in short supply, good customer relations will be an invaluable asset. Dealers are being taught the wisdom of building customer loyalty when there is plenty of product on hand. In the event of a shortage of gasoline, dealers will retain those loyal customers for other services, such as automotive repair. Friendly, helpful dealers will always have customers, even when pumps must close, and will still have them when conditions ease and pumps reopen.

In addition to dealer training, Exxon must keep up with trends in product offerings, marketers point out. For example, in the past, virtually all motor oil sold in service stations was added to customers' cars at the time of sale; now, Uniflo motor oil is offered in five-quart jugs that meet the needs of the growing do-it-yourself market.

Another trend will prepare dealers to meet anticipated growth in demand for diesel fuel, as the popularity of these high-mileage cars increases.

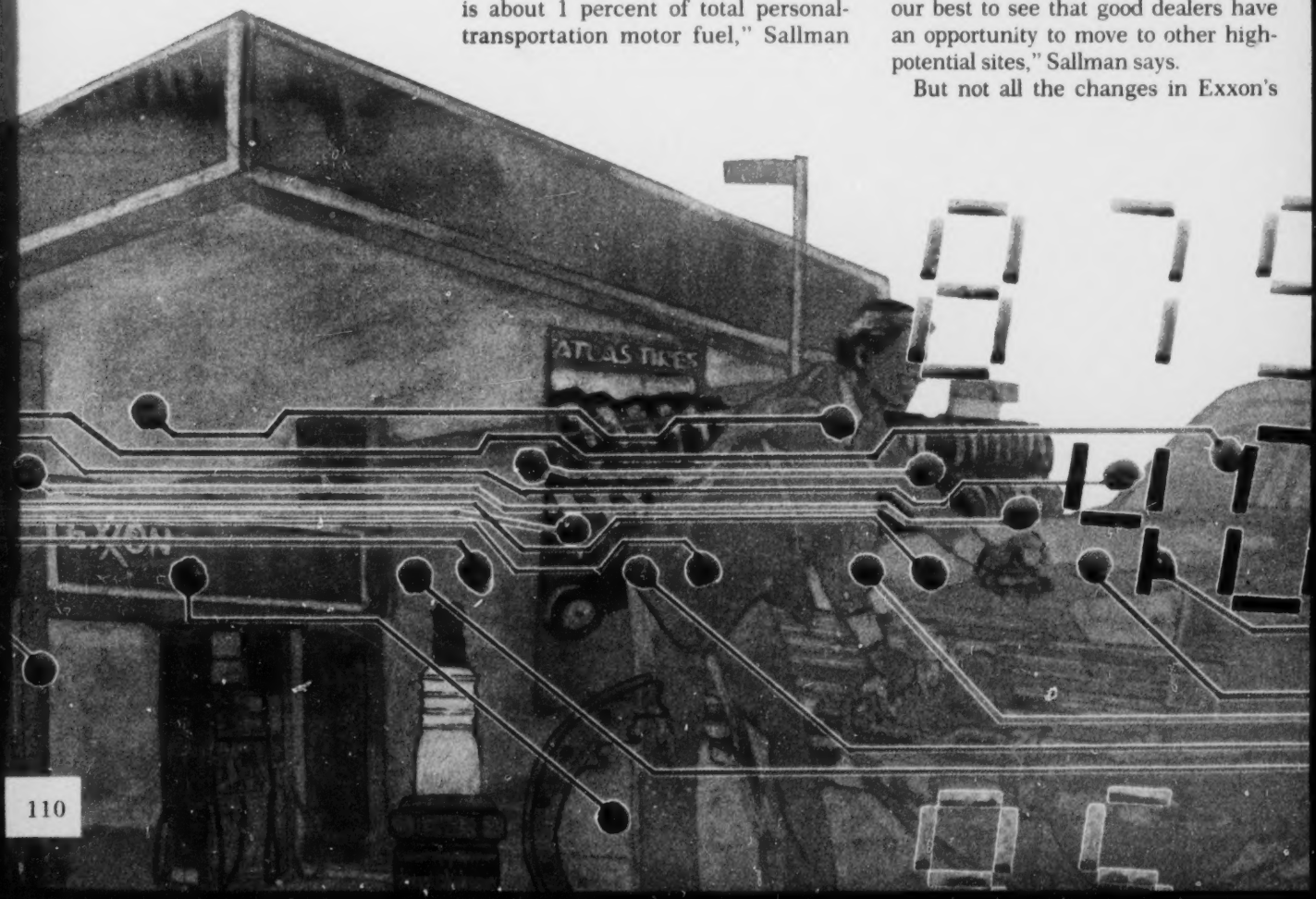
"Demand for automotive diesel fuel is about 1 percent of total personal-transportation motor fuel," Sallman notes, "but it could grow to about 20 percent by the year 2000."

To keep up with that increase in demand, Exxon will be adding diesel tanks and pumps to approximately 200 to 250 stations each year thoughout the decade of the '80s.

Keeping up with other changes in consumer trends will also be important in evaluating the future of service stations. Population shifts, changes in traffic patterns, and the impact of inflation are all factors that may lead to the closing of obsolete stations and the opening of new ones elsewhere. In plain words, when a station cannot attract enough customers to earn its keep, then it must go out of business. As an unneeded station closes, its few remaining customers usually transfer their patronage to another, better located, station elsewhere. This, in turn, boosts the economic health of stations that remain in the Exxon chain, enabling their operators to work more efficiently, employ more people, give better service, and earn a better living for themselves.

When stations are closed, relationships with competent dealers are continued whenever possible. "We do our best to see that good dealers have an opportunity to move to other high-potential sites," Sallman says.

But not all the changes in Exxon's



modernization program will take place at service stations. Retail marketers are also taking a hard look at their behind-the-scenes operations, including their refinery-to-station distribution system, credit practices, and the way supply problems are handled.

To improve distribution efficiency, marketers have introduced centralized dispatching of tank trucks, upgrading of storage terminals, computerized real-time invoicing, delivery of larger volumes of fuel per trip, and safety training for tank truck drivers.

In centralized dispatching, for example, eight centers now coordinate shipments of fuels from terminals all over the country. Computers help keep tabs on truck schedules and deliveries and save time and cut paperwork as well.

Terminals have been upgraded in size, allowing a cut in number from 105 in 1976 to 84 today. Real-time computer link-ups — systems that keep track of product movements as they occur — have improved billing accuracy at terminals and have enabled personnel to handle a larger volume of product. By increasing the size of the average delivery to 8,000 gallons (from 6,000 in 1969), marketers have been able to hold down delivery expenses.

A very different problem now under study is that of bringing under control the increasing cost of credit. "We're evaluating the pros and cons of several proposals," Kiddoo says, "but we know we have to do something to recover that cost."

Discontinuing credit, however, is not something Exxon intends to do. Charge accounts have become a way of life. Credit cards are probably here to stay; but credit customers, who represent some 30 percent of Exxon's gasoline sales, may have to bear the cost of convenience in the future.

One concept under study is called "Discount for Cash." Under this approach, the price posted on a gasoline pump by participating dealers would be the price the credit customers would pay. But customers choosing to pay cash would get a discount—possibly as much as four to six cents a gallon. "Cash prices would be competitive with those at cash-only stations," Kiddoo explains.

As in the handling of credit, Exxon marketers feel that they must be flexible in their approach to problems. Supply oscillations, inflation, rising fuel costs, declining demand, all suggest that the service station of tomorrow may bear little resemblance to that of today. But its value to the motoring public will remain. It'll be the same ball game ... but with new rules.

"As long as we use our facilities and our judgment to provide customers with what they need at the time and place that they need it, the service station can survive as a healthy and necessary retail business," Kiddoo says.

MARY JAMES

ABOUT THE AUTHOR

Once employed as a writer by Exxon Company, U.S.A.'s Marketing Department, Mary James now free-lances from her home in Houston. One of her specialties is the marketing of petroleum products.

Chevron U.S.A. Inc.
575 Market Street, San Francisco, CA 94105

September 8, 1982

Marion M. Smith
Vice-President
Marketing

Mr. John F. Roscoe
Gasoline Marketing Survey
P. O. Box 886
Benicia, CA 94510

Dear Mr. Roscoe:

The attached paper is in response to your letter of August 27, 1982 to Mr. W. J. Price regarding gasoline marketing by Standard Oil Company of California.

Socal's marketing functions are handled by a number of subsidiaries and affiliates in different parts of the world. Needless to say, the competitive and regulative environment in each country is different and our approach to gasoline marketing varies accordingly. Within the United States, Standard Oil of California's gasoline marketing is handled by Chevron U.S.A. Inc., a wholly owned subsidiary. The information in the attached paper, therefore, is applicable only to Socal's domestic marketing activities, as stated in the footnote.

I will look forward to receiving a copy of your completed report.

Sincerely yours,

M M Smith

Enclosure

STANDARD OIL COMPANY OF CALIFORNIA
CHEVRON USA MARKETING DEPARTMENT
MOTOR GASOLINE MARKETING

Market

Chevron USA markets gasoline in most areas of the United States except the Midwest. The bulk of our volume, however, is concentrated in the western states and in the Southeast.

Trade Classes

Chevron gasoline is sold by branded retail dealers (including dealers who own their own stations and dealers who lease their stations from Chevron). Chevron currently maintains a relatively small number of service stations that are directly operated by Company personnel. These outlets are used for training and for experimentation with new equipment and marketing techniques.

In addition to our branded retail segment, Chevron sells a substantial amount of gasoline to branded resellers, direct wholesale accounts and unbranded resellers.

In 1979, Chevron began a program to convert most of our commission agents to branded resellers. This program is nearing completion. It illustrates our underlying assumption that the market is best approached by a combination of dealers, resellers and direct wholesale consumers; no single mode is optimum for addressing all aspects of the gasoline market.

Retail Marketing

The retail sector is the most visible portion of the gasoline market. It is also the most capital intensive. In recent years, retail gasoline marketing has witnessed a variety of innovations including self-service, convenience stores and automated dispensers. Chevron's strategy has been to provide the motorist with as many options as possible. Therefore, most of our Company-owned and leased stations have "split-island" --both full-serve and self-serve-- capability to accommodate the cost-conscious as well as the service-oriented consumer.

Chevron also believes that there will be continued demand for automotive repair and maintenance, particularly since the number of service bays nationally has been declining and is projected to decline further. In response to the increasing mechanical complexity of new cars, we are experimenting with computerized diagnostic equipment that would enable Chevron dealers to provide better automotive service in less time.

Note: Standard Oil Company of California sells gasoline in many different countries around the world through a number of affiliates and subsidiaries. Market conditions are, of course, quite different in various countries. This discussion addresses only Standard Oil of California's domestic gasoline marketing. Chevron USA Inc. is a wholly-owned subsidiary which conducts exploration, production, transportation, refining and marketing within the United States.

Shell Oil Company

One Shell Plaza
P. O. Box 2463
Houston, Texas 77001

W. J. Bittles, Jr.
Vice President Retail Sales

September 3, 1982

Mr. John F. Roscoe
Gasoline Marketing Survey
P.O. Box 886
Benicia, CA 94510

Dear Mr. Roscoe:

I have real concerns of discussing Shell Oil Company's marketing history, strategy, structure and goals. I have, however, included a copy of Shell Oil Company's annual report, which I believe includes all that we would want to reveal in this type of publication.

Yours very truly,

Enclosure

TEXACO
U. S. A.

ELLIS W. GUNNELS
VICE PRESIDENT

P.O. BOX 52332
HOUSTON, TEXAS 77052

September 8, 1982

Mr. John F. Roscoe
Gasoline Marketing Survey
P.O. Box 886
Benicia, CA 94570

Dear Mr. Roscoe:

In response to your August 27 letter, we have enclosed several Texaco published items that will be helpful in providing you some insight into Texaco U.S.A.'s gasoline marketing activities.

Texaco's presentation before Security Analysts, November 18, 1981 (pages 16 & 17).

Our report to the National Petroleum News for their 1982 Annual Marketing Factbook.

Texaco, Inc., report of 1982 Annual Meeting, May 18, 1982 (page 6 Marketing Practices).

The two most recent issues of Texaco's Marketer Magazine.

We look forward to receiving a copy of the completed report.

Yours very truly,

Ellis W. Gunnels

EWG:me
Enclosures

DISCUSSION PERIOD

After the conclusion of the formal agenda of the meeting, Mr. McKinley said that he and other officers would respond to written comments solicited and received from stockholders through the Proxy Statement mailing, as well as questions and comments from the floor.

Almost 6,000 stockholders used cards enclosed in the Proxy Statement to make comments or ask questions, Mr. McKinley said. The largest single category of responses expressed satisfaction with the performance of the Company.

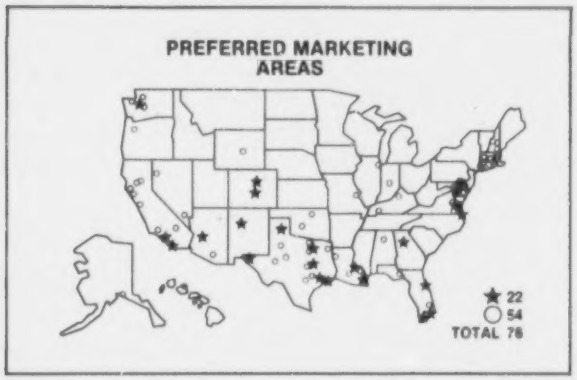
Marketing Practices

About 900 stockholders offered comments on various aspects of the Company's marketing operations—ranging from restroom cleanliness to retail prices to credit cards. In response, James W. Kinnear, Executive Vice President and Director of Texaco Inc., and President of Texaco U.S.A., said that Texaco retailers in over 21,000 service stations in the United States are independent businessmen and the Company cannot direct their practices. However, the Company does feel an obligation to counsel them and does offer to help them in maintaining inviting facilities to serve the motoring public.

On the question of prices, Mr. Kinnear said that, while these independent businessmen establish their retail prices, the Company's practice is to be competitive in the wholesale market while recognizing the need to maintain adequate revenue so that Texaco can continue to operate a modern and efficient marketing and refining system. The 3% processing charge on credit card invoices, which is assessed to retailers and wholesalers and not to credit card customers, was initiated last fall to recover some of the increased cost of handling credit cards and the higher cost of money to finance receivables. He also stated that Texaco is dedicated to strengthening its credit card system to the benefit of its retailers and its customers.

Mr. Kinnear said that Texaco's recent opening of 54 new-design, high-volume service stations, and its plans to open 102 more, demonstrate the major commitment that the Company has made to maintaining its position as a competitive, attractive supplier of petroleum products to American motorists.

From Texaco's report of the 1982 annual meeting, May 18, 1982



Six—Marketing Consolidation

Turning now to marketing operations, by mid-year 1982 Texaco U.S.A. will have completed its program of consolidating its marketing operations in preferred, more profitable areas, such as in the Northeast, Southeast, Southwest, and West Coast, and of discontinuing its uneconomic marketing operations in all or parts of 19 states in the Northern Rockies, Midwest, and certain Great Lakes areas. The map indicates the preferred areas for marketing development. The stars show the locations of highest priority.

Seven—Increasing Service Station Throughput

Texaco U.S.A.'s Retail Marketing Plan provides for about 3,000 modern, high-volume, Texaco-branded investment service stations in the preferred marketing areas. This compares with the present total of about 3,600 investment stations, and with the total of over 11,000 investment stations in the early 1970s.

Texaco U.S.A.'s marketing plan calls for increasing the throughput of investment stations from the current average of 34,000 gallons per station per month to an average of 52,000 gallons per month. As recently as 1979, average throughput was 28,000 gallons per month. These improvements will place us in a vastly improved competitive position.

Eight—Credit Cards

The Texaco credit card is an important marketing tool and Texaco U.S.A. intends to strengthen its credit card program. On the first of this month, a 3 percent processing charge was implemented on credit card invoices submitted by retailers and wholesalers. This was not a direct charge to credit card customers. Total credit card sales processed in 1980 were $2.4 billion from about 5 million active accounts, and represented 37 percent of the gasoline sold at service stations.

Implementing the processing charge was a sound business action based on many factors, some of which are as follows:

One, the high cost of the money required to carry increasing accounts receivable has become prohibitive.

Two, the increases in interest rates and overall business expenses have made the granting of free credit an unacceptable business practice.

Three, a similar charge has been made on aviation and diesel fuels since 1979 by Texaco, as well as by some competitors.

Four, the processing charge is similar to the merchants fee charged by other credit card companies, and is a generally accepted practice of long standing for those companies.

Five, with the higher cost of a gallon of gasoline—much of which is taxes—and with the increasing cost of postage, the reasonableness of our program is apparent.

Six, credit card charges often include repairs and services in which Texaco does not participate financially.

Texaco's 3 percent charge is expected to produce over $80 million in revenues during 1982. Similar revenue contributions can be anticipated each year thereafter.

Gasoline deliveries through the first 17 days of this month, since the credit card processing charge was implemented, have been higher than October sales during the same time.

While several lawsuits have been filed in opposition to the processing charge, the courts have so far turned down all requests for preliminary injunctions. Texaco is confident that its actions were proper and that the legality of the 3 percent processing charge will be upheld.

THE COMPETITIVE EDGE

The turbulent story of gasoline retailing in recent years is one of allocation followed by decontrol, of fuel shortages giving way to surpluses. It is a story of good times and bad, of moving ahead or falling behind.

From 1971 to 1981, some 68,000 service stations shut down; during the same time, however, the dollar value of sales of products and services at remaining stations more than tripled. In 1981 such sales hit the $105 billion mark, up 11.3 percent over 1980.

This issue of the Texaco Marketer *is geared toward the "upside" of that story. It's aimed at helping Texaco Retailers and Wholesalers find a competitive edge in the race for business.*

Can I make a go of it in today's market? Is there anything I can do to gain an edge on my competition? These are the questions Retailers and Wholesalers are asking today. Texaco feels all the answers are "yes".

The Company is doing its part to stay in front of the field. Among its projects are a new design for Texaco stations and a new Texaco credit card—changes that will not only attract new customers, but also strengthen brand image.

And our Retailers and Wholesalers aren't standing still either. This issue looks at several who are doing all they can to attract customers.

No one says it's going to be easy. But this issue seeks to make it easier for you to come in first against your competition, and in 1982 that might be just what you need. ✪ *Photographs by Phillip Leonian*© 1982

A COMPETITIVE EDGE PUTS YOU AHEAD

EDITOR'S NOTE

What it takes to successfully compete in today's tough gasoline market is one of the subjects Ellis W. Gunnels, Vice President, Marketing, Texaco U.S.A., covers in a timely conversation with the ***Texaco Marketer.***

***Q:** As you know, the theme of this issue focuses on helping Retailers and Wholesalers develop a competitive edge in their businesses. Could you explain what that means to you?*
A: In order to answer that, I think you first have to take into consideration the kind of "long market" in which everyone must operate today.

Through most of last year, gasoline supplies were more than ample to meet consumer demands. This is evident from the general decline in gasoline prices since the first quarter of 1981.

Texaco projections estimate that gasoline supplies should remain ample for this summer and for the foreseeable future, barring any serious disruption in the nation's crude supply.

The Department of Transportation reported only a few weeks ago that motorists traveled 30 billion more miles during the first nine months of 1981 than in 1980—but used 1.8 billion gallons less gasoline to do it. This decline in demand is mainly the result of the increased fuel efficiency of the newer passenger cars.

Texaco expects that this trend is likely to continue for some time with the result that gasoline demand will decline further over the next several years.

Now, what all these trends mean to marketers is this—we have a shrinking pie, with each competitor strongly determined to keep his percentage share of the once big pie.

Because of this contracted demand, we must operate in what is probably the most competitive market the oil industry has ever faced.

To survive and prosper in such a market, it's going to take more than just doing the same things that our competitors are doing. Today's successful gasoline marketer must do something over and above what anyone else is willing to do; he must have a *competitive edge*.

***Q:** Could you give examples of what you mean by a competitive edge?*
A: A competitive edge will mean different things to each Retailer, depending on his or her location and market.

Happily, we can rely on most of our competitors to behave just as they always have behaved despite the tough market, and this is where a competitive edge can start.

One big edge is for a Retailer to offer more convenient hours than local competitors. Most stations are still closing about the same time as always. To get an edge, you just need to be open one or two hours later or open on Sundays, perhaps.

You can also rely on many of your competitors to give poor service, to have employes who are not in uniform, to have dirty restrooms.

And many competing Retailers never really speak to their customers. Just a simple "hello" by a Texaco Retailer to every customer provides a competitive edge, small as it may seem. I've seen many Retailers use the Texaco credit card for this personal touch since they get a chance to see the customer's name printed on the card. When they return the card to such a customer, they thank him or her by name.

It is not that difficult for each Retailer to find a competitive edge. When it's used, it really works.

***Q:** What steps is Texaco itself taking to build a competitive edge in marketing?*
A: One of our big steps concerns the Texaco credit card.

- First, with the implementation of the three percent processing fee, we have ensured that the fee will help to offset the high cost of billing and receivables. We can depend on having the credit card as far as we can see into the future. Had we not taken this recent action to help offset the annual costs to Texaco of handling the card, we would have had to give serious consideration toward eliminating it.

But we know that a good percentage of customers regularly use the card and provide a broad base of support for its existence.

- Second, Texaco now accepts MasterCard and VISA invoices from Retailers for purchases of products and services at stations. These two cards have a combined circulation of well over 100 million cards in the United States. Every one of these cardholders can now use them

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to purchase products from Texaco Retailers.

- Third, on March 1, we introduced a new credit card which has a two-year expiration date. The old card it replaces was non-expiring. Over the years, a number of the old cards were added to a long list of stolen or bad-credit-risk cards.

Now the new cards are being sent only to those customers who are good solid accounts for Texaco and are in good financial standing. Texaco Retailers can feel confident that, when they do business with a customer with the new card, their risk of charge backs on such a sale are greatly reduced.

- Fourth, we also have a number of programs in operation to generate new Texaco credit card accounts in good standing and to bring several million new customers into Texaco stations. For instance, we are very pleased with our special incentive program this spring to award cash and other prizes to Retailers based on the number of new credit card applications they submit (see back page).

***Q:** In connection with the three percent processing fee, a Federal court in Philadelphia recently upheld the legality of the fee. Would you like to comment on this? (See page 28 for a report on the court's decision.)*

A: Texaco is pleased that the Company's position has been upheld in that case and that the ruling clearly states that the actions taken by Texaco in implementing the three percent processing charge are "legal and proper in all respects."

***Q:** This past fall, in Houston, Texaco introduced two new prototype retail outlets—with self-service and car washes—which feature new graphics. (See page 6 for a complete look at the new graphics.) How will this new look help to give the Company a competitive edge?*

A: As Retailers and Wholesalers know, Texaco is vigorously pursuing self-service, and our construction program is focusing on building high-volume, self-serve outlets. Incidentally, Dan Lundberg, the oil industry analyst, recently reported that self-serve accounts for about two-thirds of all gasoline sales today.

So, in conjunction with our construction of high-volume, self-serve facilities, we felt there was a great need to strengthen the public's awareness of Texaco in the marketplace and to make our brand image stand out among competitors.

With the introduction to new graphics, we are seeking a look that not only will appeal to long-standing customers but also will attract new customers as well.

The gallonage figures at the prototype outlets are certainly speaking loud and clear. Throughput at each facility is well over 100,000 gallons a month.

***Q:** What is the timetable for introducing the new graphics around the country?*

A: Currently, we have about 40 stations under construction in our preferred markets which will all feature new graphics. We're looking at a construction and rehabilitation program for investment stations that will stretch over a five-year period.

We're also encouraging Texaco marketers to adopt the new graphics at any station they plan to build or renovate. In fact, the Texaco Wholesaler Council met in Houston in early March, at our invitation, in order to give members the opportunity to take a personal look at our two prototype outlets.

***Q:** This year Texaco Marketing has established a throughput goal for each station of 40,000 gallons a month. What is the reason for this?*

A: We need high unit volume for a number of reasons. The main one is to lower cost. The higher the volume at a station, the less it costs to operate it as fixed costs are spread over a greater base of sales.

Higher volume is just as good for a Retailer as it is for Texaco. A Retailer needs as much volume as he or she can get to offset fixed expenses such as rent, insurance, and utility costs.

Texaco has been working with Retailers and Wholesalers on higher throughput for several years now, and we've made great strides. We had the *biggest* increase in unit volume last year of any recent year in the Company's history.

A station selling at least 40,000 gallons a month generally can make a nice profit for the Retailer.

***Q:** What are some ways Retailers can achieve higher throughput?*

A: Well, a Retailer has to be competitive across the board.

The main elements that sell gasoline are the "basics"—price, convenience, location, service, and hours of operation. These basics are what customers want and in this kind of market the customer is king.

A Retailer doesn't have to be lower than anybody else on the street, but he can't be the highest either. He has to be open when customers want him open. He needs to give good service at the island. He needs to offer self-service if that's what people want. He must maintain an attractive, clean facility and have his employes present a neat appearance.

These are the things Texaco Retailers must do if they expect to be successful.

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***Q:** Could you briefly list some of the other steps which Texaco marketing will be taking this year to help Retailers and Wholesalers get ahead?*
A: We are in the process of revamping our Retailer training programs. These not only will reemphasize why and how Retailers must return to the basics of good retailing but also will feature new specialized training programs in the latest techniques for operating c-stores, car washes, and self-service successfully. We will be opening a new training station in Houston this summer in which Retailers in the training programs will receive practical experience in managing c-stores and car washes.

Another step we will continue to take concerns keeping Texaco competitive in its advertising support of Retailers and Wholesalers.

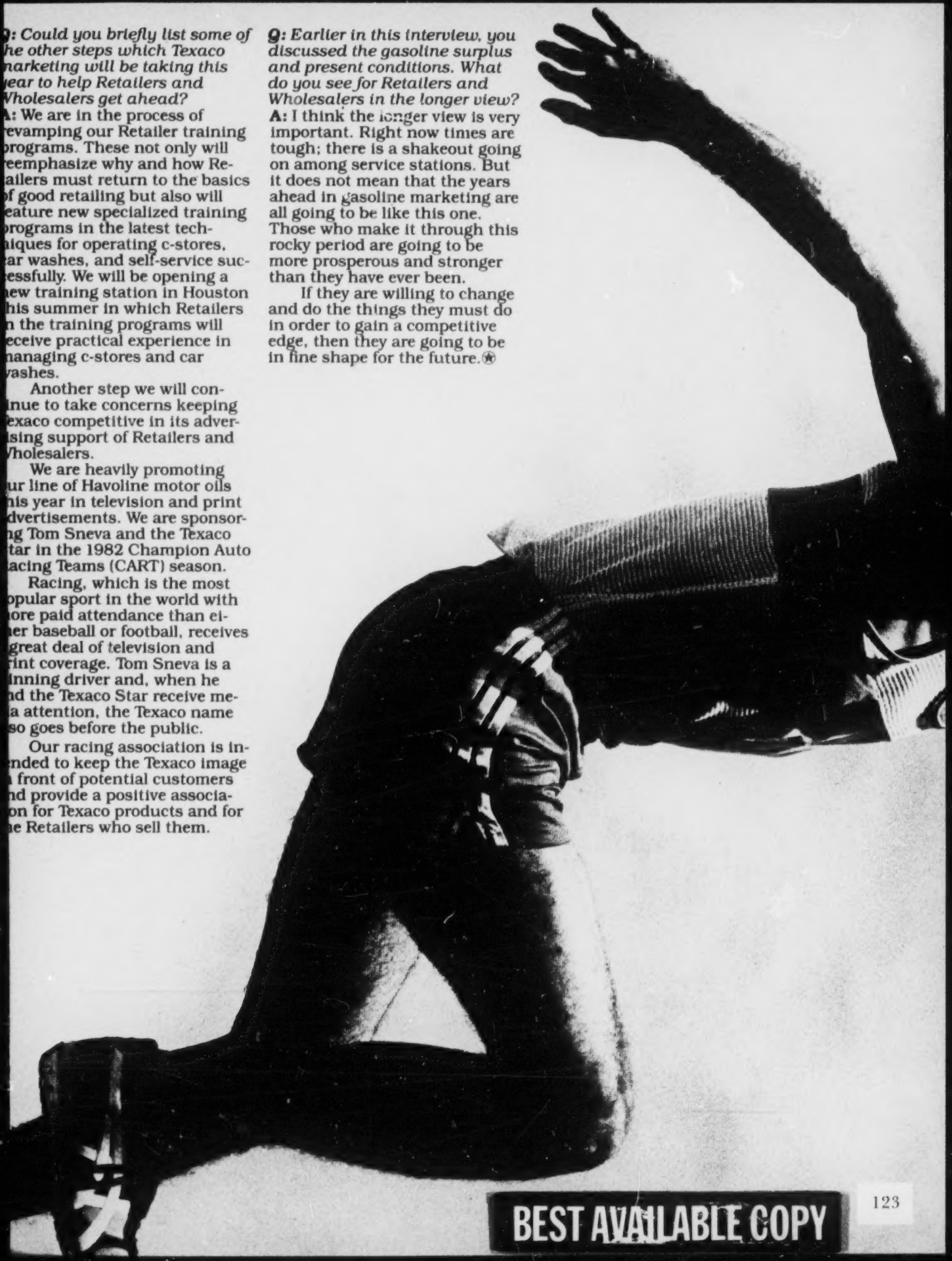
We are heavily promoting our line of Havoline motor oils this year in television and print advertisements. We are sponsoring Tom Sneva and the Texaco Star in the 1982 Champion Auto Racing Teams (CART) season.

Racing, which is the most popular sport in the world with more paid attendance than either baseball or football, receives a great deal of television and print coverage. Tom Sneva is a winning driver and, when he and the Texaco Star receive media attention, the Texaco name also goes before the public.

Our racing association is intended to keep the Texaco image in front of potential customers and provide a positive association for Texaco products and for the Retailers who sell them.

***Q:** Earlier in this interview, you discussed the gasoline surplus and present conditions. What do you see for Retailers and Wholesalers in the longer view?*
A: I think the longer view is very important. Right now times are tough; there is a shakeout going on among service stations. But it does not mean that the years ahead in gasoline marketing are all going to be like this one. Those who make it through this rocky period are going to be more prosperous and stronger than they have ever been.

If they are willing to change and do the things they must do in order to gain a competitive edge, then they are going to be in fine shape for the future.★



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Mobil Oil Corporation

3225 GALLOWS ROAD
FAIRFAX, VIRGINIA 22037

September 2, 1982

Mr. John F. Roscoe
Gasoline Marketing Survey
P.O. Box 886
Benicia, CA 94510

Dear Mr. Roscoe:

Your letter of August 27th to R. L. Abbott, requesting information relating to Mobil marketing strategy, structure and goals, has been referred to Marketing Planning & Financial Analysis for consideration. A careful review of your information needs, relative to the best interests of Mobil Oil Marketing, clearly indicates that we cannot respond affirmatively.

Being intimately involved in the marketing survey field, you are no doubt cognizant of the highly competitive nature of petroleum marketing. Mobil strategies, structure and goals must, therefore, be considered proprietary. Accordingly, it would not be prudent to make these data available for dissemination to the industry through inclusion in your Gasoline Marketing Survey.

Considerable information dealing with the marketing structure of Mobil, and all other gasoline marketers, is available in the public domain. These data are published in industry periodicals generally and, most specifically, in the annual National Petroleum News Fact Book.

While your interest in Mobil Oil Corporation is sincerely appreciated, we trust you fully understand the reasons for our not being able to provide definitive information. We do, of course, wish you continued success in these survey endeavors.

Yours very truly,

F. W. D. Manz
General Manager
Marketing Planning &
Financial Analysis

ARCO Petroleum Products Company
515 South Flower Street
Mailing Address: Box 2679 - T.A.
Los Angeles, California 90051
Telephone 213 486 3511

September 20, 1982

Mr. John F. Roscoe
Gasoline Marketing Survey
P. O. Box 886
Benicia, California 94510

Dear Mr. Roscoe:

Your letter of August 27, requesting a statement from ARCO Petroleum Products Company regarding marketing history, strategy, goals, etc., was not received in the proper office in Los Angeles until very close to your deadline date of September 15, 1982. It is not possible, therefore, for us to comply with your request in the time frame specified.

If this is to become an annual survey, please address future requests to me as indicated below, providing sufficient lead time for development of the information requested.

Very truly yours,

William J. Craig

William J. Craig, Administrator
Retail Marketing Department
ARCO Plaza - Room 2089

WJC:nsm

ARCO Petroleum Products Company is a Division of AtlanticRichfieldCompany

G. N. Nicholson
Vice President
Marketing, United States

Marathon
Petroleum Company

Findlay, Ohio 45840
Telephone 419/422-2121

September 3, 1982

Mr. John F. Roscoe
Gasoline Marketing Survey
P.O. Box 886
Benicia, CA 94510

Dear Mr. Roscoe:

In response to your letter of August 27, enclosed is one of our recent publications which outlines the activities of our Refining and Marketing organization.

Sincerely,

G. N. Nicholson

GNN:kaf
Enc.

REFINING & MARKETING

Marathon has developed a closely knit and flexible system of refining, distribution and marketing facilities for a high level of efficiency in serving its customers. Four domestic refineries have a combined capacity of 588,000 barrels of crude oil per day, ranking Marathon ninth in refining capacity in the United States.

U.S. Refineries	Barrels/Day
Garyville, La.	255,000
Robinson, Ill.	195,000
Texas City, Tex.	69,500
Detroit, Mich.	68,500

The Garyville plant was brought on stream in 1976. Process units and related facilities completed in 1979 have boosted the plant's unleaded gasoline capacity to more than 130,000 barrels per day.

Together, the four refineries are equipped to produce a full range of petroleum products, including regular, unleaded and premium unleaded gasolines, heating oil, diesel fuels, industrial fuel oil, asphalt, petroleum coke and propane. Special units produce a variety of petrochemical feedstocks.

The refineries are effectively integrated by a system of refined product pipelines that permits refining operations to be planned on a company-wide scale and provides efficiency and flexibility in the distribution of products.

Marathon, acutely aware of its responsibility to conserve energy, participated from 1972-1980 in an industry-wide campaign to reduce fuel consumption at its U.S. refineries. Additional conservation programs are being conducted on an ongoing basis.

Marathon concentrates its marketing activity in the geographic area efficiently served by its refining and distribution system. The area includes 21 states, primarily in the Midwest and Southeast. Products are sold under the Marathon brand name through retail outlets in Ohio, Indiana, Illinois, Michigan and Kentucky. These stations provide the traditional range of services to the substantial segment of the public that prefers this style of attention to its automotive needs. At the same time, the company has kept abreast of the growing preference of many motorists for self-service in their purchase of gasoline.

At the wholesale level, Marathon sells products to many private-brand marketers and industrial customers in both the Midwest and Southeast regions of the nation. It is a leading supplier of refined products to independent marketers in this marketing area.

In Europe, Marathon owns a petrochemicals refinery at Burghausen, West Germany. With a capacity of 70,000 barrels per day, this plant produces ethylene, propylene, a butadiene-containing stream, benzene, light fuel oil and low-sulfur petroleum coke. These products are sold by contract and at wholesale.

Marathon has a 27.7 percent interest in a refinery at La Coruña, Spain.

From *Marathon Oil Company Today*

Union 76 Division

Union Oil Company of California
1650 East Golf Road, Schaumburg, Illinois 60196
Telephone (312) 885-5134

File 3
MI 172

John W. Groesch
Manager, Marketing Information

September 16, 1982

Mr. John F. Roscoe
Gasoline Marketing Survey
P. O. Box 886
Benicia, California 94510

Dear Mr. Roscoe:

Your inquiry of August 27, 1982 has been referred today to Ms. Karen A. Sikkema, our Manager Corporate Communications, located in Los Angeles. The request was delayed because of the mails, and vacations.

All future inquiries should be addressed to

Ms. Karen A. Sikkema,
Manager Corporate Communications
Union Oil Center
461 South Boylston Street
Los Angeles, California 90017

Very truly yours,

John W. Groesch

JWG:eb

Miss Sikkema called September 20, 1982. Needs more time. Would take a month to do. Just got today.

C. F. Luberger
Manager
Research & Economics
Marketing Department

Conoco Inc.
P. O. Box 2197
Houston, TX 77001

September 9, 1982

John F. Roscoe
Gasoline Marketing Survey
P.O. Box 886
Benicia, California 94510

Dear Sir:

Your request for information on the Conoco Marketing Department dated August 27, 1982, addressed to Mr. D. R. Clark, Vice President North American Marketing, has been referred to me for a reply.

We believe material contained in the Du Pont Annual Report for 1981, pages 12-14, would be suitable for your use.

A copy of the Report is enclosed for your convenience.

Very truly yours,

C. F. Luberger
Manager
Research & Economics
Marketing Department

CFL/ECM/A70
Enclosure

Ashland

Ashland Petroleum Company

DIVISION OF ASHLAND OIL, INC.

P.O. BOX 391 • ASHLAND, KENTUCKY 41114 • (606) 329-3333

R. C. BALL
Group Executive Assistant

September 20, 1982

Mr. John F. Roscoe
Gasoline Marketing Survey
P. O. Box 886
Benicia, California 94510

Dear Mr. Roscoe:

Your letter of August 27, 1982 has been referred to me. I have enclosed a publication entitled "Current Facts 1982" which contains some additional information not found in our Annual Report. I hope you will find this information helpful in compiling your report.

Sincerely,

Robert C. Ball

RCB:rl
Atts.

Marketing

Ashland's principal marketing area for gasoline and fuel oils includes the Ohio Valley, the upper Midwest, the Great Lakes, the Middle Atlantic States, the East Coast, and a portion of the southeastern United States.

Sales of petroleum products under the Ashland name are made primarily through retail outlets and bulk plants throughout Kentucky, Ohio, West Virginia and in parts of Indiana, Illinois, New York, Pennsylvania and Virginia. Private brand stations owned by Ashland sell gasoline in all of the company's principal markets.

Ashland markets petroleum products directly through 150 bulk plants, 130 of which are owned and 20 leased. Ashland also sells petroleum products under various brand names through 2,200 retail outlets. The company operates more than 600 high-volume, cost-efficient retail stations, including 265 combination gasoline/merchandise units under Save Mart and Superamerica brand names.

The major portion of Ashland's production of gasoline, kerosine and light fuel oils is sold wholesale to government agencies, private industries, and to approximately 2,500 distributors and independent jobbers that resell through several thousand outlets.

PHILLIPS PETROLEUM COMPANY
BARTLESVILLE, OKLAHOMA 74004 918 661-6600

PETROLEUM PRODUCTS GROUP
Marketing Division

September 3, 1982

Mr. John F. Roscoe
Gasoline Marketing Survey
P. O. Box 886
Benicia, California 94510

Dear Mr. Roscoe:

This is in response to your letter of August 27, 1982 requesting market information to be included in your report entitled, "What Do The Top 25 Oil Companies Say About Gasoline Marketing".

Since much of the information we would divulge has been furnished to the NPN and is available in their annual Fact Book, we have chosen not to participate at this time.

We thank you for your interest in Phillips Petroleum Company.

Sincerely yours,

G. S. Page
Director, Planning & Economics
746 Adams Building

GSP/bc

My comments this afternoon primarily will be directed toward the refining end of the business. I'll discuss what we have in the way of facilities, including projects currently underway, and what our thinking is regarding the future. In addition, I'll briefly touch on our marketing operations -- discussing our current marketing configuration and how we plan to position ourselves to move product in the years ahead.

At this point, I'd like to discuss an area that is outside my immediate purview but is intimately related to what I do -- marketing operations.

I will concentrate on gasoline sales since they make up a large portion of our marketing effort.

Looking to the future, we see the demand for refined petroleum products behaving similar to forecasts in many industry studies. Gasoline demand will basically remain flat for the foreseeable future. We expect the shift in demand from leaded gasoline to unleaded products of generally higher quality to continue. We see demand for products like middle distillates increasing over the next several years. And, residual fuel oil demand will decline -- perhaps by an average of from three to four percent per year over the decade.

In order to get a clearer picture of our future marketing direction, I think it's useful to look at Getty Refining and Marketing's current configuration for gasoline marketing.

The company markets through nearly 2,500 Getty branded outlets in 11 northeastern states and in the metropolitan Tulsa and Kansas City areas, and through some 1,900 Skelly and Surfco branded outlets in 15 midwestern and Rocky Mountain states. Since we have only about 100 Mohawk branded outlets in California, Arizona and Nevada, I'll direct my comments to our eastern and midwest marketing activities.

Generally, a very important consideration for us in moving product today and in the future relates to balancing product demand, where possible, with our own proprietary production. This is really a key point in deciding whether to withdraw from or move into a particular marketing area.

Another important consideration relates to class of customer --we want to move gasoline through the most efficient, profitable outlets. In many marketing areas this means increased emphasis on retail business; in other geographical locations it makes sense to maintain an active jobber program.

In terms of gasoline grade and octane strategy, our future looks like this: on the East Coast, where proprietary distribution systems allow for individual grade integrity, we're planning to continue our present strategy of moving two grades of product. Currently we're studying a plan to sell a high-octane unleaded premium and an unleaded regular with the start up in 1983 of the low pressure reformer at the Delaware Refinery.

In the central-states area, we're employing a lower overall octane strategy. This is primarily due to the fact that most product is distributed through common carrier pipelines in the region. As a result, we are more limited in creating special quality features for our product because of the need to meet pipeline specifications. In addition, demand for leaded regular is much higher in this part of the country because of agriculture.

So in the central region, we plan to continue marketing three grades of gasoline -- a 90-octane unleaded premium, an unleaded regular and a leaded regular.

Most of you are probably aware of some recent strategic moves we've made in marketing operations.

Most recently, we announced that we will discontinue our consumer credit card program, effective November 1. Bank credit cards, such as Visa and Mastercard, will continue to be accepted at all our company-operated outlets. Independent branded marketers of our products will be encouraged to accept bank cards under a new program in which Getty will pay card processing fees. By picking up bank card processing costs, we're hoping to provide our dealers with the opportunity to attract a larger group of potential customers. Obviously, we see a need to supply gasoline consumers with the credit option and expect to attract a significantly greater number of potential customers holding bank cards.

Last year, an average of 300,000 active Getty credit card accounts comprised about 13 percent of our branded gasoline sales.

On July 1 we made another significant move with the introduction of the Getty trademark in the greater Tulsa and Kansas City markets at about 340 Skelly and Surfco outlets. We expect the rebranding effort, which will be expanded to other markets in the central and Rocky Mountain states, to increase national awareness of Getty and improve our market position.

Overall, we expect that marketing petroleum products will remain a highly competitive endeavor for the foreseeable future. Right now, the industry is in the midst of a shakeout period following decontrol. We feel that this period offers opportunity. Through aggressive retail development and by utilizing different gasoline grade and octane strategies, as market conditions dictate, we feel that we will at least hold our own in the years ahead.

We will continue to look for special targets of opportunity where we can add value to our current slate of products through additional refinery investments.

TOSCO CORPORATION
10100 SANTA MONICA BOULEVARD
LOS ANGELES, CALIFORNIA 90067
213/552-7000

DOUGLAS C. PRESTINE
VICE PRESIDENT
MARKETING AND SUPPLY GROUP

September 10, 1982

Mr. John F. Roscoe
Gasoline Marketing Survey
P.O. Box 886
Benicia, California 94510

Dear Mr. Roscoe:

Thank you for your invitation to participate once again in your report on gasoline marketing.

Enclosed you will find a brief description of Tosco's capabilities, strategy, and philosophy as an independent refiner-wholesale marketer of petroleum products, along with a copy of Tosco's 1981 Annual Report. We trust you will find the format employed in keeping with the guidelines you established, and suitable for inclusion in your report.

Your interest in our participation is indeed appreciated.

Very truly yours,

D. C. Prestine

DCP:mj
Enclosures

TOSCO CORPORATION
10100 SANTA MONICA BOULEVARD
LOS ANGELES, CALIFORNIA 90067
213/552-7000

Tosco is the second largest independent refiner of gasoline in the United States with a total rated refining capacity of 261,500 barrels per day at four refinery locations in California (two), Arkansas, and Oklahoma. The company's distribution system reaches more than 25 western and mid-south states through approximately 150 product terminals yielding a large and complete system unique to an independent. This capability has enabled Tosco to become a dominant supplier to the independent, private brand petroleum marketing sector within the markets it serves.

Tosco addresses the independent petroleum marketing sector with an ability to respond to its increasing requirement for product as that marketing sector grows through new and modernized retail outlets. This is accomplished through the company's capability as a refiner to convert heavy, sour and generally lesser quality crude oils into high quality finished products. Because of this capability Tosco inherits the business of those refiners who were previously unwilling and who at escalated costs are presently unable to effectively invest in the sophisticated conversion facilities necessary to handle the crude oils of today. Recognition of this capability has been largely responsible for Tosco being viewed as a highly desirable long term supplier.

The mainstay of Tosco's business is the independent wholesale purchaser-retailer of motor fuels who operates from a handful to a hundred or more efficient, cost effective retail outlets. Tosco believes their customers are the most efficient and cost effective element within petroleum retailing, and has divested of their own retailing activities to concentrate on becoming a more effective refiner, wholesale supplier.

Tosco's target customer is the chain retailer capable of prospering and growing under all market conditions; not simply during those periods of temporary short supply and broad margins. Once certain of a customer's desire and ability to grow, Tosco attempts to relate to that customer as a partner in its own growth rather than as just another customer. By so doing, a strengthened relationship is fostered where an improved understanding of customer interests and needs permits Tosco to become a more responsive and in turn more desirable supplier.

It is Tosco's intent to demonstrate itself to be a consistent, reliable supplier capable of responsibly delivering product volumes regardless of market conditions. In return, Tosco expects the same variety of consistency and reliability in a customer's purchase of regular volumes of product. Each party can then effectively and with confidence plan future business directions.

Tenneco Inc

H. Tony DeHaas
Corporate Information Manager

Tenneco Building
P. O. Box 2511
Houston, Texas 77001
(713) 757-2164

The sector of the petroleum industry most visible to consumers is retail marketing. Tenneco Oil Processing and Marketing has established itself in this field as an innovative, competitive organization.

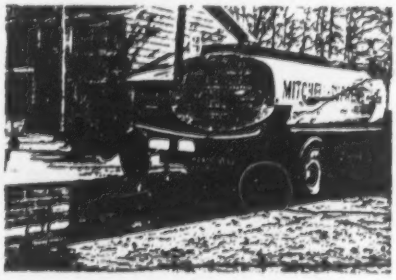
Years ago the company pioneered two retail gasoline marketing strategies now tried and proven by the public — combination food and gasoline sales facilities and self-serve gasoline outlets. These concepts aim at a buying public which is highly mobile, in a hurry and responsive to competitive prices.

That first strategy's success enabled the company to build a network of unusually efficient, high volume Food Stores, Mini Food Marts and Island Marketers. By 1980 Tenneco operated over 200 of these combination stores, with a highly selective site acquisition program underway to add another 15 locations annually.

An expansion of this strategy was initiated in 1981 with the opening of Tenneco's first high volume, self service truck stop. A strategy focused on meeting the present and future needs of the trucking industry.

Tenneco's overall retail gasoline marketing network includes these facilities plus about 300 other company-owned, salaried employee-operated gasoline outlets. Sales are made under the Tenneco, Bay, Direct, Q-S, TLC and Red Diamond brand names. The marketing network concentrates on the South and Southeast, where sales can be readily supported by the Chalmette Refinery's gasoline production. The Marketing Division's administrative and accounting offices are located in Atlanta, Ga., with headquarters for Direct Oil Corporation and Q-S Petroleum in Nashville, Tenn.

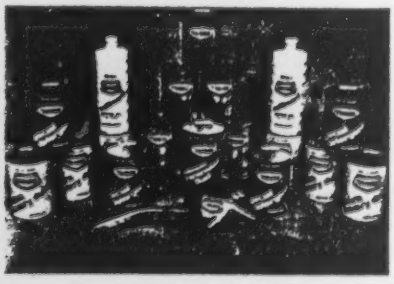
Tenneco Oil also supplies numerous wholesale purchasers with gasoline, diesel fuel and home heating oil in southeastern, mid-



Atlantic and northeastern states. And, under the Mitchell Supreme and TLC brand names, the company sells home heating oil to retail customers in the Northeast.

On an average day, Tenneco's domestic customers purchase about 71,000 barrels of gasoline, 44,000 barrels of middle distillates, 6,000 barrels of petrochemicals (excluding Petro-Tex's sales) and 18,000 barrels of other products.

In Europe, Tenneco Oil markets gasoline and related products through another Tenneco company, Gebr. Broere B.V. In the Netherlands, Gebr. Broere B.V. operates over 220 stations under the GB trademark. The company has introduced highly successful self-serve outlets combined with convenience food stores.



CROWN CENTRAL PETROLEUM CORPORATION

PRODUCERS · REFINERS · MARKETERS OF PETROLEUM PRODUCTS AND PETROCHEMICALS

GENERAL OFFICES · ONE NORTH CHARLES · P.O. BOX 1168 · BALTIMORE, MARYLAND 21203

September 17, 1982

Mr. John F. Roscoe
Gasoline Marketing Survey
P.O. Box 886
Benicia, CA 94510

Dear Mr. Roscoe:

Enclosed please find Crown's statement for your publication "What Do the Top 25 Oil Companies Say About Gasoline Marketing?" We look forward to receiving a copy when it is published.

Sincerely,

Melissa Scheitler

Melissa Stout Scheitler
Corporate Communications

MSS/rlb
Enclosure

DESCRIPTION OF MARKETING PROGRAM
CROWN CENTRAL PETROLEUM CORPORATION

Crown Central Petroleum Corporation retails and wholesales finished petroleum products in 14 states and the District of Columbia. Its branded gasolines are marketed through 213 high-volume, multi-pump service stations in the East and Southeastern states.

Retail Marketing

Crown's multi-pump retail approach, which was developed and implemented in the 1960's and 1970's, is founded on high-volume marketing techniques. It involves the sale of gasoline and motor oils at competitive discount prices in spacious and attractive service stations featuring fast, efficient service. Performance of automotive repair work is prohibited on the premises, which eliminates the clutter typically associated with the full-service type operation. The primary factors in the success of Crown's multi-pump operation, all of which are designed to maximize sales volumes, are: 1) the establishment of a brand reputation for quality gasoline and motor oils at competitive discount prices; 2) the strategic location of the facilities in terms of gallonage potential; 3) the design of the facilities (including numerous pumps and pump islands, ease of traffic flow within the premises, strong lighting, and other appearance factors);

4) cleanliness of the operation; 5) appearance of driveway service attendants and performance of prescribed driveway services; and 6) the establishment of a special brand reputation, which has been achieved by Crown through its unique and uniform marketing policy of requiring its multi-pump stations, whether operated by independent lessee-dealers or by the Company itself, to be open and in operation on an around-the-clock basis, 24 hours per day, 7 days per week, 365 days per year.

The multi-pump approach has generally been highly successful throughout Crown's marketing areas. It provided the impetus for Crown's dramatic growth in brand recognition and acceptance during the 1970's in the geographical marketing areas where the program had been implemented. It also played an important role in Crown's total gasoline sales volumes more than doubling from 1968 to 1981, as did an expansion and modernization project in the early 1970's at Crown's Houston refinery.

Many of the major oil companies have recognized the public's ready acceptance of Crown's multi-pump approach and have themselves embarked on programs geared to capture the high-volume, discount price sector of the market. Crown's strength continues to lie in its strict adherence to the fundamental precepts on which its program rests.

Wholesale Marketing

In addition to retailing, Crown supplies its gasoline and fuel oil products to numerous wholesale accounts. These transactions constitute approximately 60% of the marketing department's sales. Such sales are made to accounts which are not affiliated with a branded refiner, and which may be reselling the product at retail under their own name or to various commercial consumers. Sales are made by barge, in pipeline batch quantities, and by single truckload. While Crown does not supply the home fuel oil market on a direct basis, many of its wholesale customers serve this market using Crown's products.

NON-RESPONDENTS

CHAMPLIN PETROLEUM COMPANY
Mr. Fred Otto
Sr. V. P. Manufacturing & Marketing

CITIES SERVICE COMPANY
Mr. J. H. Dewell
V. P. Retail Marketing

THE COASTAL CORPORATION
Mr. D. J. Hill
Sr. V. P. Marketing

GULF OIL—U.S.
Mr. M. P. Zanotti
V. P. Marketing Coordinator

KERR-McGEE REFINING CORPORATION
Mr. W. N. Pritchett
V. P. Marketing

AMOCO OIL COMPANY
Mr. S. G. Van Sickle
V. P. Marketing

STANDARD OIL COMPANY (OHIO)
Mr. R. G. Griffin
Marketing

SUN COMPANY
Mr. T. A. Burtis
Chairman and CEO

TESORO PETROLEUM COMPANY
Mr. Robert V. West, Jr.
Chairman and CEO

AMERICAN PETROFINA
Mr. R. C. Low
V. P. Marketing

GASOLINE STATISTICS—WATCH OUT FOR THE NUMBERS

There is no reliable set of numbers or statistics on the gasoline business. We've looked at a lot of them and have talked to people who compute, tabulate, massage, guess, and borrow numbers. No set of numbers appears completely reliable or really agrees with numbers published by other sources. The business is so big and so complicated that no one has figures that are kept the same way or are completely comparable. Since we are interested in broad trends, an analysis of the various figures available should be sufficient to give you the direction of the tide and the course of the currents.

In the following pages are some pertinent figures that you may need to be aware of if you want to understand what is happening in the gasoline business. In addition to the government statistics, we've compiled some of our own. They have been taken from the annual reports of the major oil companies. They probably are fairly comparable since the majority of the firms use the same accounting firms.

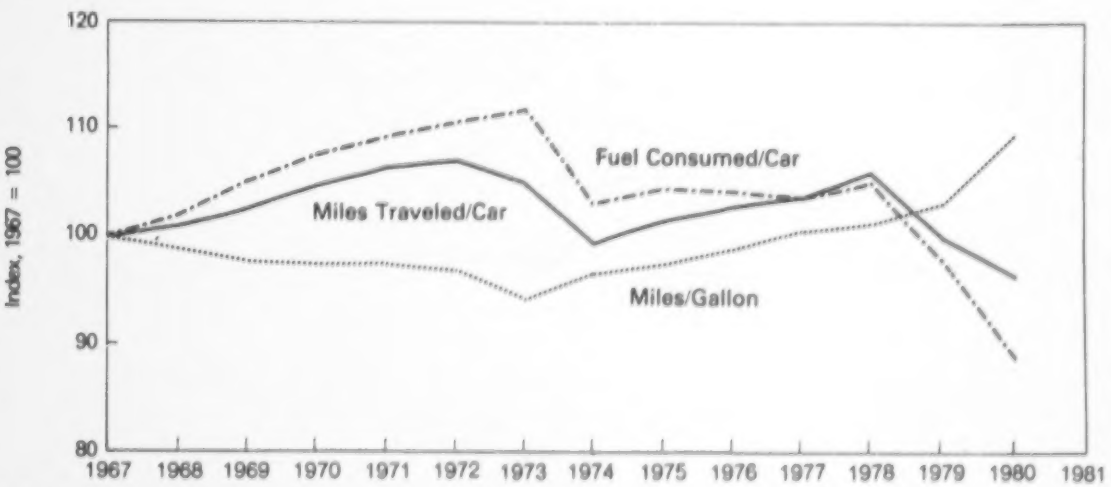
It's a good rule not to rely too heavily on any figure unless you personally generate or compile the numbers.

It is our intention to continue publishing **What Do the 25 Largest Oil Companies Have to Say About Gasoline Marketing** on an annual basis. Each year we expect to expand and improve the report. We'd like it to be as accurate and as factual as possible. If you note inaccuracies, mistakes in logic or computations, or misstatements, we'd like to be notified.

Energy Indicator–U.S. Passenger Car Efficiency

Year	Average Fuel Consumed per Car		Average Miles Traveled per Car		Average Miles Traveled per Gallon of Fuel Consumed	
	Gallons	Index	Miles	Index	Miles	Index
1967	684	100.0	9,531	100.0	13.93	100.0
1968	698	102.0	9,627	101.0	13.79	99.0
1969	718	105.0	9,782	102.6	13.63	97.8
1970	735	107.5	9,978	104.7	13.57	97.4
1971	746	109.1	10,121	106.2	13.57	97.4
1972	755	110.4	10,184	106.9	13.49	96.8
1973	763	111.5	9,992	104.8	13.10	94.0
1974	704	102.9	9,448	99.1	13.43	96.4
1975	712	104.1	9,634	101.1	13.53	97.1
1976	711	103.9	9,763	102.4	13.72	98.5
1977	706	103.2	9,839	103.2	13.94	100.1
1978	715	104.5	10,046	105.4	14.06	100.9
1979	664	97.1	9,485	99.5	14.29	102.6
1980	603	88.2	9,135	95.8	15.15	108.8
1981	581	85.0	9,026	94.7	15.54	111.6

U.S. Passenger Car Efficiency Index



Geographic coverage: the 50 United States and District of Columbia.
Source: ● U.S. Department of Transportation, Federal Highway Administration, Federal Highway Statistics Division, "Highway Statistics", Table VM-1.

Source: U.S. Department of Energy, Energy Information Administration DOE/EIA (81/06), Monthly Energy Review June.

MOTOR FUEL HIGHWAY CONSUMPTION

Comprises all fuels (gasoline) diesel or other fuels used for propulsion of vehicles under state motor fuel laws

Excludes federal purchases for military use

Year	Total Consumption in Billions of Gallons	Average Annual Percent Change
1960	57.9	4.0[1]
1965	71.1	4.2
1970	92.3	5.4
1972	105.1	6.7
1973	110.5	6.2
1974	106.3	−3.8
1975	109.0	2.5
1976	115.7	6.2
1977	119.6	3.4
1978	125.1	4.6
1979	122.1	−2.4
1980	116.0	−4.9
1981	115.2	− .6

1. Change from 1955.

Total Consumption in Billions of Gallons

Year	Highway	Non-Highway	Total Gasoline Use	Annual Average Percentage Change
1978	112.2	3.6	115.8	—
1979	108.1	3.7	111.8	−3.5
1980	101.2	3.6	104.8	−6.3
1981	99.6	3.5	103.1	−1.6

Source: U.S. Federal Highway Administration, Highway Statistics Annual.

MOTOR VEHICLE REGISTRATIONS

Year	Total Motor Vehicles	Total Automobiles Private, Public and Commercial	Avg. Annual Percent Increase in Registration
1950	49,200,000	40,400,000	7.4
1960	73,900,000	61,700,000	3.3
1970	108,400,000	89,200,000	3.2
1975	132,900,000	106,700,000	2.3
1976	138,500,000	110,400,000	4.2
1977	142,400,000	112,300,000	2.8
1978	148,800,000	116,600,000	4.5
1979	154,118,099	120,247,990	3.6
1980	155,889,692	121,723,650	1.1
1981	158,456,511	123,461,507	1.6

Source: Registrations–U.S. Federal Highway Administration Statistics, 1979 and 1980.

Figures from 1978 and before from Federal Highway Administration, Highway Statistics as reported in the Statistical Abstract of the United States, 1980.

U.S. Petroleum Developments: 1981

Synopsis

In 1981, the United States significantly reduced its dependence on petroleum imports by reducing domestic consumption of petroleum. This decline in domestic consumption occurred principally as a result of lower economic activity in 1981 and the ongoing effects of repeated sharp increases in petroleum product prices since 1973. Since domestic production was stable during 1981 and petroleum product stocks decreased at a moderate rate of only 0.1 million barrels per day, the one million barrels per day (6 percent) drop in domestic consumption resulted in a one million barrels per day (15 percent) decrease in net petroleum imports. (See Exhibit 1.) Imports decreased despite an ample worldwide supply of crude oil and stable world prices.

Domestic prices of crude oil and petroleum products continued to rise during the first quarter of the year, then decreased throughout the remainder of 1981. Both the reduction in consumption and the ample worldwide supplies of crude oil put downward pressure on the prices of petroleum products.

U.S. Petroleum Summary
(million barrels per day)

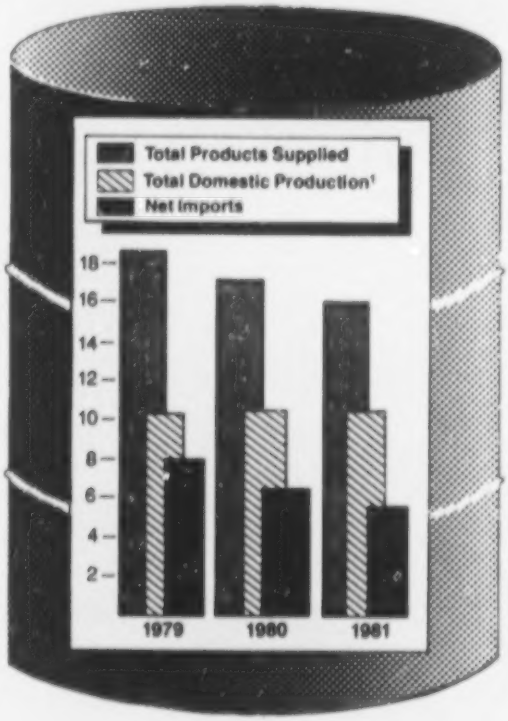
	1980	1981	Change
Total products supplied	17.1	16.1	-6%
Motor gasoline[1]	6.8	6.6	-4%
Distillate fuel oil[1]	3.0	2.8	-5%
Residual fuel oil[1]	2.6	2.1	-19%
Total petroleum production[2]	10.2	10.2	0
Refinery crude oil inputs	13.5	12.5	-8%
Net petroleum imports	6.4	5.4	-15%

[1]Motor gasoline figures for 1980 recast to account for data system changes in 1981. See Explanatory Note 4.
[2]Includes crude oil and natural gas plant production.

Note: 1979 and 1980 products supplied figures for motor gasoline and for distillate and residual fuel oils have been recast to account for data system changes in 1981. They differ from figures shown in the "Historical Statistics." See Explanatory Note 4. Also, all 1981 stock changes were based upon the December 31, 1980 (New Basis) figures. They differ from figures shown in the "Historical Statistics."

Exhibit 1. PETROLEUM SUMMARY

Million Barrels per Day



[1]Includes crude oil and natural gas plant production.
Source: "Historical Statistics" *Petroleum Supply Annual.*

Developments in Petroleum Consumption

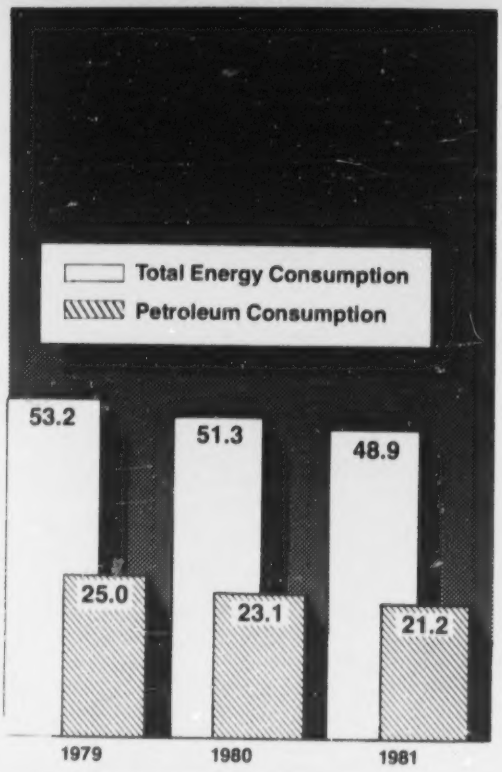
In 1981, petroleum consumption (products supplied for domestic use[1]) in the United States declined for the third consecutive year. Major reasons for this continued decline were a sluggish economy and petroleum price increases in 1979, 1980 and 1981. Petroleum remained the dominant energy source, accounting for 43 percent of the country's total energy used. Its share has diminished slowly during the last several years as consumers have conserved or switched to other fuels. (Ref. 1)

The ratio of petroleum consumption to Gross National Product decreased substantially during the 1979-81 period, indicating that energy conservation and other structural changes have had a substantial impact. (See Exhibit 2.) Factors contributing to the continuation of the downtrend were: improvement in fuel efficiencies, consumers switching to lower cost alternate fuels, the public emphasis on all aspects of fuel conservation, and petroleum product price increases during the period.

Among the petroleum products, motor gasoline and residual fuel oil accounted for three-fourths

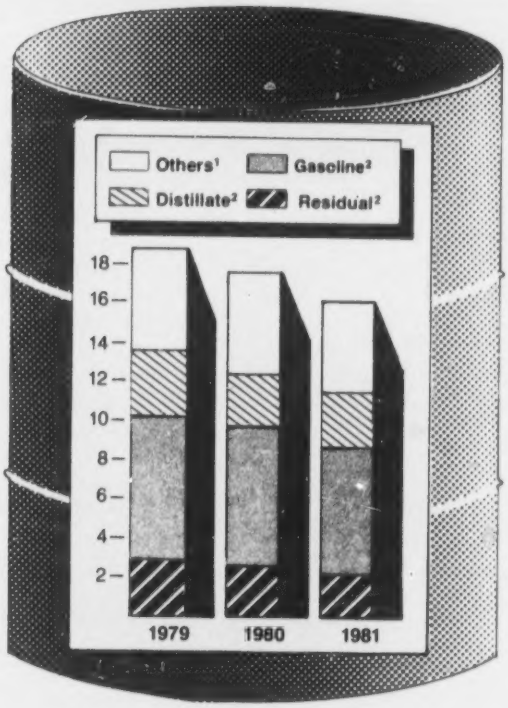
This article was originally prepared in the Petroleum Supply Division, Energy Information Administration, by Barry P. Berlin, John L. Albright, and William G. Park. First published in the March 1982 issue of the *Petroleum Supply Monthly*, it has been revised to present final 1981 data.
Unless otherwise referenced, statistics in this article were derived from statistics presented in this issue of the **Petroleum Supply Annual**.

[1]Petroleum products supplied equals net domestic production of petroleum products, plus net product imports, plus net product stock withdrawals.



Source: *Monthly Energy Review* and *Survey of Current Business.*

Exhibit 3. PETROLEUM PRODUCTS SUPPLIED FOR DOMESTIC USE Million Barrels per Day



¹Other petroleum products include liquefied gases, jet fuels, and petrochemical feedstocks.

²Based on 1979 and 1980 figures by EIA. See Explanatory Note 4.

Source: "Summary Statistics," *Petroleum Supply Annual.*

of the 1.0 million barrels per day decline in petroleum consumption between 1980 and 1981. (See Exhibit 3.)

Motor Gasoline. Motor gasoline supplied for domestic use averaged 6.6 million barrels per day in 1981, down 11 percent from 1978, the year gasoline consumption peaked. Federal Highway Administration estimates indicate that vehicle miles traveled have increased since 1980. Increased vehicle fuel efficiency therefore appears to be an important factor in the decline in gasoline consumption. The average passenger car efficiency reached 15.2 miles per gallon of fuel in 1980, a significant increase from the 14.3 miles per gallon recorded in 1979. (Ref. 1) The estimated average passenger car efficiency in 1981 was 15.7 miles per gallon, an improvement of about 4 percent over 1980. (Ref. 2)

Year end average retail prices of all grades and services of motor gasoline increased to 135 cents per gallon in 1981—up 13 cents (11 percent) from year end 1980, and up 70 cents (108 percent) from year end 1978. (Ref. 1)

Distillate Fuel Oil. Distillate fuel oil supplied for domestic use in 1981 decreased 140 thousand barrels per day (5 percent) from 1980, much less than the 11 percent decrease from 1979 to 1980.

Increases in the price of home heating oil continued to induce some conversions to natural gas and other alternate fuels. U.S. residential heating oil prices averaged 121 cents per gallon in 1981, up 23 cents (23 percent) from the previous year. (Ref. 1)

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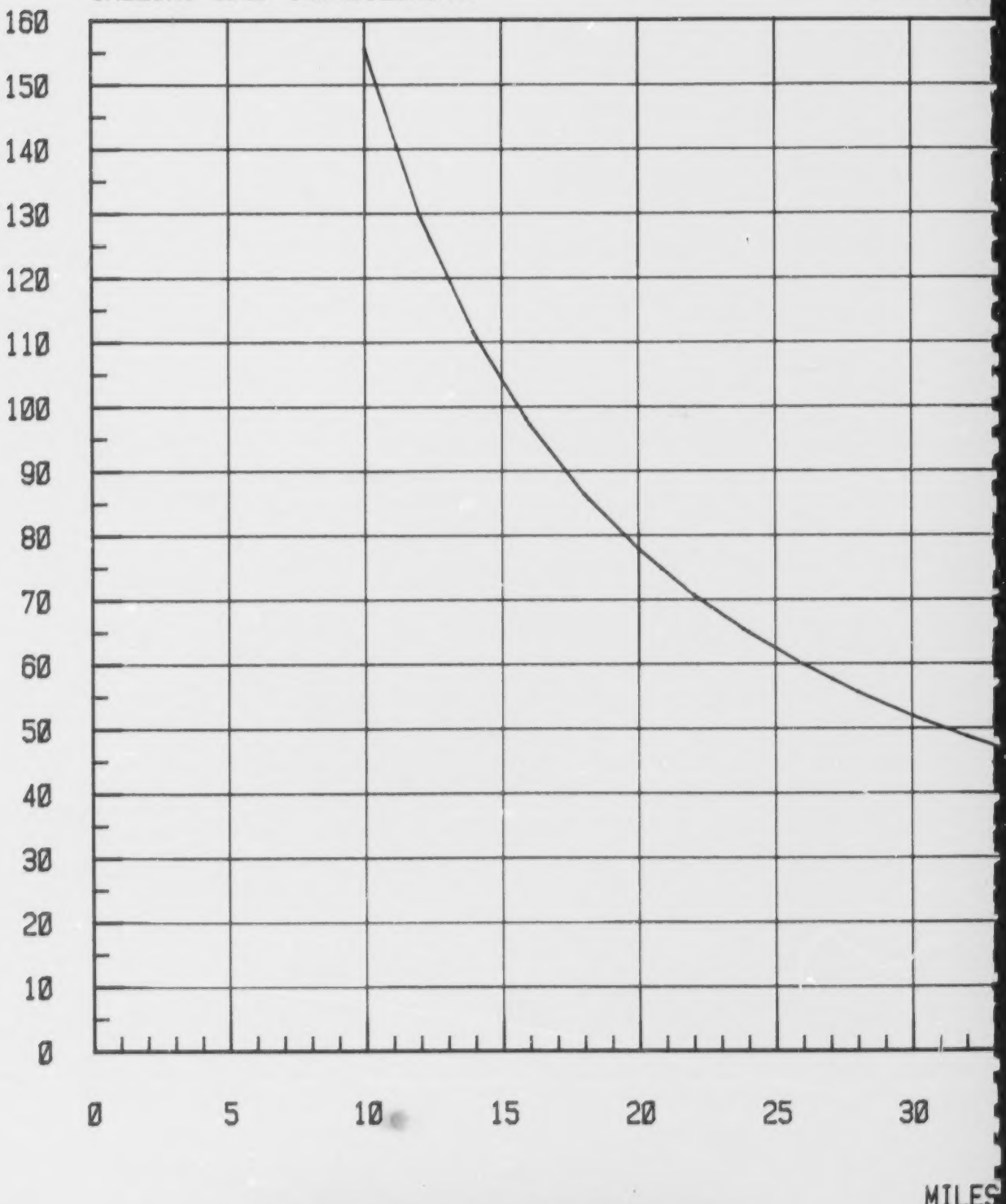
SCHEDULE SHOWING GASOLINE CONSUMPTION IN THE UNITED STATES
AT VARYING AVERAGE MILES PER GALLON
WITH ALL OTHER FACTORS REMAINING CONSTANT

Total U. Gas Average Miles Per Gallon	Consumption (Billions of Gallons)	Percentage Change	Percent Change from 100 Billion Gallons
15.54	100		
16.54	94	– 6%	– 6%
17.54	89	– 6%	–11%
18.54	84	– 5%	–16%
19.54	80	– 6%	–20%
20	78	–22%	–22%
25	62	–20%	–38%
30	52	–17%	–48%
35	44	–14%	–56%
40	39	–13%	–61%
45	35	–11%	–65%
50	31	–10%	–69%
55	28	– 9%	–72%
60	26	– 8%	–74%
65	24	– 8%	–76%
70	22	– 7%	–78%

TOTAL U.S. GAS

Assuming va
All other fa
1981 average



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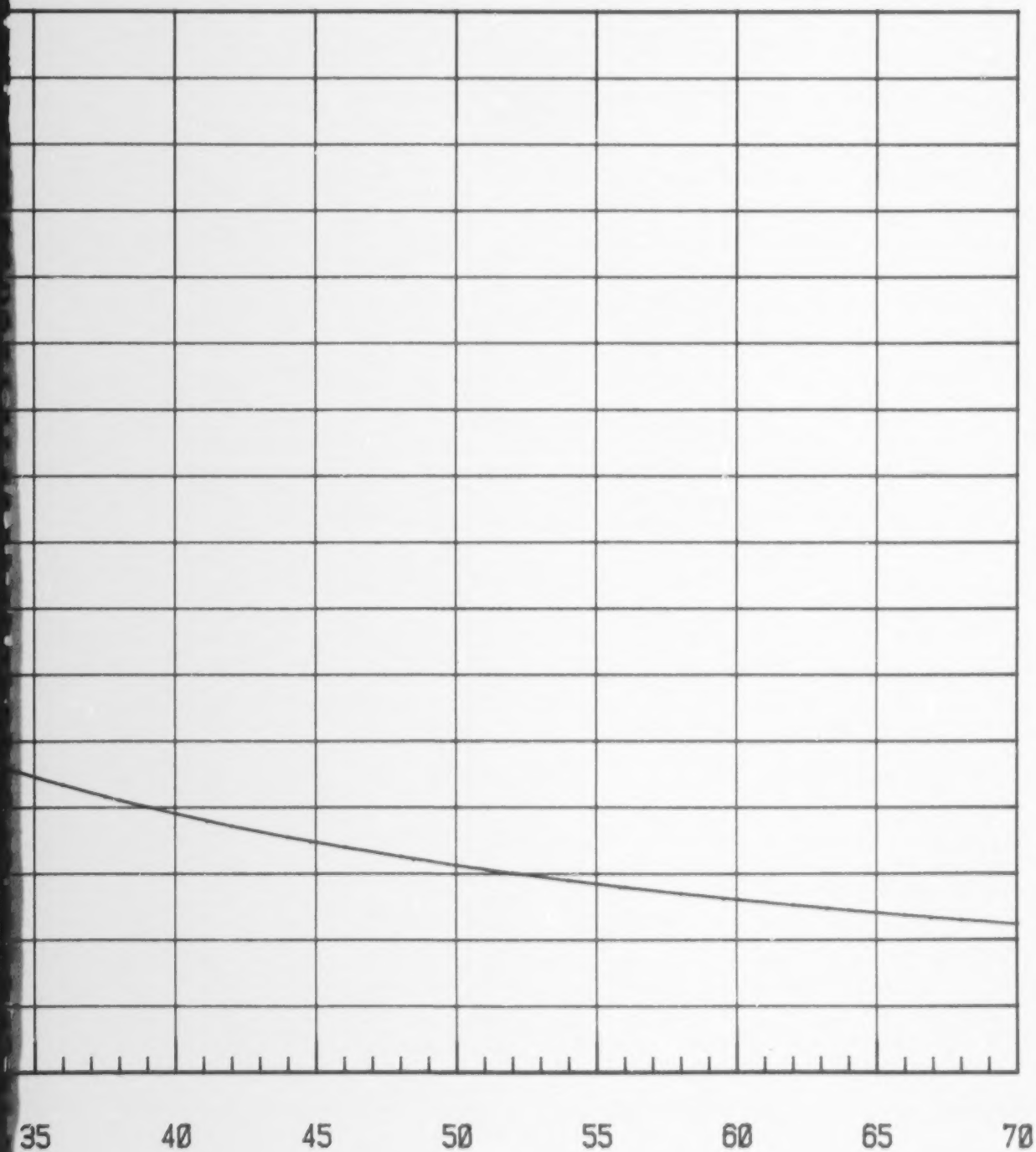
LINE CONSUMPTION

ng miles per gallon

rs remain constant

es per gallon = 15.54



35 40 45 50 55 60 65 70

ER GALLON

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COMPARISON OF STATIONS OPERATED BY THE 25 LARGEST OIL COMPANIES
1980 vs. 1981

Company	1980 # of Stations	1981 # of Stations	Increase or Decrease
1. Exxon	22,886	20,585	−2,301
2. Chevron	12,139	11,586	− 553
3. Shell	15,400	13,700	−1,700
4. Amoco	21,300	20,100	−1,200
5. Texaco	24,000	21,000	−3,000
6. Mobil	17,425	16,564	− 861
7. Gulf	16,055	15,277	− 778
8. ARCO	8,200	7,122	−1,078
9. Marathon	2,789	2,146	− 643
10. Union	12,300	12,500	+ 200
11. Conoco	5,605	5,708	+ 103
12. Ashland	2,437	2,200	− 237
13. Sohio	2,300	2,300	Even
14. Sun	9,000	8,400	− 600
15. Phillips	12,805	13,900	+1,095
16. Cities Service	5,300	5,784	+ 484
17. Champlin	850	863	+ 13
18. Getty	5,787	5,071	− 716
19. Coastal	550	565	+ 15
20. Tosco	46	None	− 46
21. Kerr-McGee	1,452	1,519	+ 67
22. Fina	3,852	4,014	+ 162
23. Tenneco	480	484	+ 4
24. Crown Central	212	216	+ 4
25. Tesoro	189	108	− 81
Totals	203,359	191,712	−11,647

Source: 1981 annual reports of these companies.

COMPARISON OF AVERAGE RETURN ON EQUITY OF THE 25 LARGEST OIL COMPANIES

1980 vs. 1981

Company	Average Return on Shareholders Equity in 1980	Average Return on Shareholders Equity in 1981	Increase or Decrease
1. Exxon	23.6%	20.6%	– 3.0%
2. Chevron	21.7%	20.0%	– 1.7%
3. Shell	22.0%	21.0%	– 1.0%
4. Amoco	21.6%	19.2%	– 2.4%
5. Texaco	21.1%	17.6%	– 3.5%
6. Mobil	23.9%	17.6%	– 6.3%
7. Gulf	15.3%	12.5%	– 2.8%
8. ARCO	24.4%	20.8%	– 3.6%
9. Marathon	21.0%	16.6%	– 4.4%
10. Union	20.1%	20.8%	+ .7%
11. Conoco	N/A	N/A	N/A
12. Ashland	19.1%	6.3%	–12.8%
13. Sohio	39.7%	31.0%	– 8.7%
14. Sun	16.8%	21.5%	+ 4.7%
15. Phillips	23.8%	16.9%	– 6.9%
16. Cities Service	19.9%	Loss	–19.9%
17. Champlin	N/A	N/A	N/A
18. Getty	21.0%	18.0%	– 3.0%
19. Coastal	18.7%	Loss	–18.7%
20. Tosco	20.0%	9.0%	–11.0%
21. Kerr-McGee	13.6%	14.8%	+ 1.2%
22. Fina	22.4%	14.2%	– 8.2%
23. Tenneco	18.0%	16.3%	– 1.7%
24. Crown Central	9.9%	1.7%	– 8.2%
25. Tesoro	32.0%	19.6%	–12.4%

Source: 1981 annual reports of these companies.

UNITED STATES GASOLINE PRODUCT SALES
(Thousands of Barrels Daily)

Company	1980	1981	Increase or Decrease	Percent of Increase or Decrease
1. Exxon	549	479	– 70	Down 13%
2. Chevron	449	387	– 62	Down 14%
3. Shell	527	470	– 57	Down 11%
4. Amoco	504	474	– 30	Down 6%
5. Texaco	435	404	– 31	Down 7%
6. Mobil	428	363	– 65	Down 15%
7. Gulf	414	401	– 13	Down 3%
8. ARCO	329	292	– 37	Down 13%
9. Marathon	249	244	– 5	Down 2%
10. Union	253	218	– 35	Down 14%
Totals for 10 Largest Refiners	4,137	3,732	–405	Down 9.8%
11. Conoco	166	158	– 8	Down 5%
12. Ashland	208	191	– 17	Down 8%
13. Sohio	261	246	– 15	Down 6%
14. Sun	289	256	– 33	Down 11%
15. Phillips	214	209	– 5	Down 2%
16. Cities Service	149	145	– 4	Down 4%
17. Champlin[1]	174	236	+ 62	Up 36%
18. Getty	134	125	– 9	Down 7%
19. Coastal	N/A	N/A	N/A	N/A
20. Tosco[2]	98	122	+ 24	Up 24+
Totals for 2nd 10 Largest Refiners	1,693	1,688	– 5	Down 3%
21. Kerr-McGee	68	79	+ 11	Up 16%
22. Fina	N/A	N/A	N/A	Down 11%
23. Tenneco[1]	126	142	+16	Up 13%
24. Crown Central	N/A	N/A	N/A	Down 1%
25. Tesoro	48	35	– 13	Down 27%
Totals for 3rd Tier Companies	242	256	+14	Up 6%
Totals for 22 Refining Companies	6,072	5,676	–396	Down 6.5%

1. Total Petroleum Product Sales.

2. Gasoline Produced (vs. Gasoline Product Sold).

Figures may include some Naptha, but figures for top 10 companies seem fairly pure and are comparable as reported.

Source: 1981 annual reports of these companies.

REFINERY CAPACITY

During 1981, the U.S. petroleum industry experienced a sharp decline in the number of petroleum refining facilities in operation. Twenty-three refineries closed during 1981, leaving 301 operable refineries reporting a combined crude oil distillation capacity of 17.9 million barrels per calendar day as of January 1, 1982. This represented a decrease of .7 million barrels per calendar day when compared to the crude oil distillation capacity on January 1, 1981. Of the total crude oil distillation capacity of 17.9 million barrels per calendar day, 1.8 million barrels per calendar day were idle. This represents an increase from January 1, 1981, of 1.2 million barrels per calendar day. Closer scrutiny of this figure reveals that 47 refineries were "totally idle" (but capable of reopening within 90 days), accounting for 990,204 barrels per calendar day.

The crude oil distillation capacity projected for January 1, 1983, shows a net decrease of 184,292 barrels per stream day. Expansions and additions slated for completion during 1982 are projected to be 319,008 barrels per stream day. This increase is offset by the scheduled closing of thirteen additional refineries during 1982 accounting for 503,500 barrels per stream day. Projections for January 1, 1984, show a net crude distillation capacity increase of 223,500 barrels per stream day reflecting modifications, expansions, and additions to increase the capability to process high sulfur crude oil.

Projected refinery input of crude oil and other feedstocks during 1982 declined dramatically. The projected average refinery input of crude oil and other feedstocks during 1982 is 14.7 million barrels per calendar day, a drop of 2.5 million barrels per calendar day when compared with the average input projected in the January 1, 1981 report. This lower level of refinery input is reflected in the projected production for selected products that shows a decrease in motor gasoline, jet fuel, and distillate fuel totalling 1.2 million barrels per calendar day.

Projections for the next two years will bring the total average refinery input to 15.9 million barrels per calendar day by 1984. This increase is mostly attributable to the revamping of refining operations to further process the bottom of the crude barrel through downstream facilities, thereby lessening the significance of crude distillation capacity decline.

Shell and working storage capacities as of January 1, 1982, totalled 799,034 thousand barrels and 696,626 thousand barrels, respectively. Refinery shutdowns and the transfer of petroleum products to bulk terminal operations decreased the shell and working storage capacities at refineries by 41,230 thousand barrels and 34,973 thousand barrels, respectively.

Source: Petroleum Supply Annual, 1981, vol. 1–July 1982.

REFINERS' CRUDE DISTILLATION CAPACITY AS OF JANUARY 1, 1982

Refiner	Barrels Per Calendar Day	Percent of Total U.S. Refining Capacity
1. Exxon	1,549,000	8.65%
2. Standard Oil of Calif.	1,469,700	8.21%
3. Shell Oil Co.	1,161,600	6.49%
4. Standard Oil Co., Indiana, AMOCO	1,134,000	6.33%
5. Texaco	1,008,000	5.63%
6. Mobil	859,700	4.80%
7. Gulf Oil Co.	803,200	4.48%
8. Atlantic Richfield Co.	642,200	3.58%
9. Marathon Oil Co.	588,000	3.28%
10. Union Oil Co. of Calif.	490,000	2.73%
Subtotal–Top 10 Refiners	9,705,400	54.25%
11. Dupont/Conoco	474,894	2.65%
12. Ashland Oil	462,943	2.58%
13. Standard Oil Co. of Ohio, SOHIO	452,000	2.52%
14. Sun Co.	378,500	2.11%
15. Phillips Petroleum Co.	374,000	2.09%
16. Cities Service Co.	320,000	1.79%
17. Union Pacific–Champlin	283,800	1.59%
18. Getty Oil Co.	280,577	1.57%
19. Coastal Corporation	273,982	1.53%
20. Tosco Corp.	259,500	1.45%
Subtotal–Second 10 Refiners	3,560,196	19.90%
Subtotal–Top 20 Refiners	13,265,596	74.15%

REFINERS' CRUDE DISTILLATION CAPACITY AS OF JANUARY 1, 1982

Refiner	Barrels Per Calendar Day	Percent of Total U.S. Refining Capacity
21. Dow Chemical	190,000	1.06%
22. Koch Industries	184,300	1.03%
23. Kerr-McGee	165,580	.93%
24. Apex Oil	153,100	.86%
25. American Petrofina	150,000	.83%
26. Total Petroleum	144,500	.81%
27. Murphy Oil Corp.	129,200	.72%
28. Energy Cooperative	126,000	.70%
29. Agway Petroleum	119,600	.67%
30. Tenneco Oil Co.	114,000	.63%
Subtotal–Third 10 Refiners	1,476,280	8.25%
Total Capacity of 30 Companies with more than 100,000 b/d Capacity	14,741,876	82.40%
31. Crown Central Petroleum Corp.	100,000	.55%
32. GHR Energy	100,000	.55%
33. Amerada Hess Corp.	98,000	.55%
34. Earth Resources Co.	94,823	.53%
35. Little America Refining Co.	94,500	.53%
36. Farmland Industries	88,500	.49%
37. Independent Refining Corp.	80,000	.45%
38. Tesoro Petroleum Corp.	74,600	.42%
39. Diamond Shamrock Corp.	71,100	.40%
40. Husky Oil Co.	65,300	.37%
Subtotal–Fourth 10 Refiners	866,823	4.84%
Subtotal–Top 40 Refiners	15,608,699	87.24%
Total Operating Refinery Capacity for the United States	17,889,734	

Source: U.S. Department of Energy–Energy Information Administration DOE/EIA–340(81), July 1, 1982.

REFINERS' CRUDE DISTILLATION CAPACITY AS OF JANUARY 1, 1982

	Number of Refining Companies	Barrels per Calendar Day Capacity	Percent of Total Refining Capacity
Companies with a capacity more than 100,000 b/d	30	14,741,876	82.40%
Companies with a capacity 30,001 to 100,000 b/d	32	1,824,093	10.19%
Companies with a capacity 10,001 to 30,000 b/d	54	1,006,271	5.62%
Companies with a capacity 10,000 b/d or less	59	317,494	1.77%
Totals	175	17,889,734	100.00%

Last year's report showed 190 refining companies.

Source: U.S. Department of Energy—Energy Information Administration Petroleum Supply Annual, July 1982.

REFINING CAPACITY AS OF JANUARY 1, 1982

1981 vs. 1982

	1981	1982	
Top 10 Refiners Capacity	10,220,700	9,705,400	(515,300)
2nd 10 Refiners Capacity	3,646,402	3,560,196	(86,206)
3rd 10 Refiners Capacity	1,451,610	1,476,280	+24,670
4th 10 Refiners Capacity	844,800	866,823	+22,023
Top 40 Refiners Capacity	16,163,512	15,608,699	(554,813)
Total Other Refiners Capacity	2,457,008	2,281,035	(175,973)
Total Refiners Crude Distillation Capacity	18,620,520	17,889,734	(730,786)
Total Refineries	324	301	– 23

Forty-seven of the operable refiners representing crude distillation capacity of 990,204 barrels per day were totally idle as of January 1, 1982.

44.5% of U.S. refining output was motor gasoline in 1981.

Source: Petroleum Supply Annual, July 1982, vs. Department of Energy, page 48.

PERCENT OF REFINING CAPACITY UTILIZED IN THE UNITED STATES

Company	1980	1981	Percent of Increase or Decrease
1. Exxon	N/A	N/A	N/A
2. Chevron	80.5%	73.4%	Down 7.1%
3. Shell	77.1%	71.4%	Down 5.7%
4. Amoco	71.3%	69.5%	Down 1.8%
5. Texaco[1]	73.4%	69.5%	Down 3.9%
6. Mobil	N/A	N/A	N/A
7. Gulf	79.0%	72.0%	Down 7.0%
8. ARCO	88.0%	96.2%	Up 8.2%
9. Marathon	75.3%	69.7%	Down 5.6%
10. Union	79.9%	76.0%	Down 3.9%
11. Conoco	63.7%	63.2%	Down .5%
12. Ashland	74.3%	64.5%	Down 9.8%
13. Sohio	88.6%	80.0%	Down 8.6%
14. Sun	79.0%	76.0%	Down 3.0%
15. Phillips	61.6%	75.0%	Up 13.4%
16. Cities Service	N/A	72.0%	
17. Champlin	N/A	79.0%	
18. Getty	81.6%	80.4%	Down 1.2%
19. Coastal	N/A	N/A	N/A
20. Tosco	73.1%	73.0%	Down .1%
21. Kerr-McGee	N/A	N/A	N/A
22. Fina	N/A	N/A	N/A
23. Tenneco	73.0%	70.0%	Down 3.0%
24. Crown Central	N/A	N/A	N/A
25. Tesoro	73.3%	66.4%	Down 6.9%

1. Worldwide.

Source: 1981 annual reports of these companies.

A scrap metal business

Refining, the oil companies' weakest business, is getting weaker. For more than two years, the industry has hoped that a rise in oil demand would put things right. Instead, demand has slumped. Only deep cuts can now stop the refining business causing a huge money-spill throughout the 1980s. Losses of about $10 billion in the world's refining industry in 1981 may force the oil companies at last to cut sharply. A report from the International Energy Agency* in Paris will make frightening reading for the chairmen of the big oil companies, which control most of the world's refineries.

The IEA expects an 11% decline in OECD oil consumption by 1990 from its peak in 1979 of 38m barrels a day. Even in 1979 primary refining capacity was 25% higher than the OECD's consumption of refined oil products. But large oil company coffers, and illusory fears of a shortage of oil, encouraged companies to ignore the problem. With real oil prices falling as costs rise, they can no longer afford to subsidise their refineries.

The IEA predicts that by 1985 surplus refining capacity will increase to 50% of demand, as extra capacity, planned in the late 1970s, comes on stream and demand for oil weakens. By 1990, it thinks, surplus capacity may exceed 52% of demand.

Worst hit is western Europe, the world's biggest refining centre, with 43% of the OECD's total refining capacity of 47m b/d, and more than two thirds of its idle plants. Europe had 42% more capacity than it needed in 1979. The IEA thinks the surplus will grow to 62% in 1985, and could be bigger still by 1990. "Untenable", says the IEA.

America, with 42% of total OECD capacity, should also be worried. Its surplus is forecast to grow to 44% of demand in 1985 and 53% by 1990, compared with 13% in 1979. Japan, with only a 15% surplus in 1979, is heading for almost double that in 1985 and 1990.

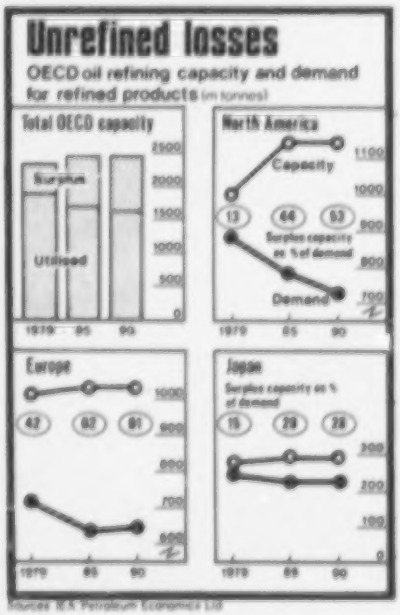
The IEA says blandly that "this would imply that a substantial amount of distillation capacity is likely to be shut down permanently". But habits of oil companies die hard. They have only tinkered with the problem so far. British Petroleum's new chairman, Mr Peter Walters, is putting a little dash into timid plans announced before he took over in August. BP then said it would cut 25% of its refining capacity of 100m tonnes a year in western Europe by the end of 1982. Mr Walters now plans to make that 40% by 1985-86. That may still be too little too late. "Why is he waiting that long?", asks Mr Peter Lilley, an oil analyst and BP-watcher at the London stockbrokers, W. Greenwell.

Royal Dutch/Shell's response so far, according to Mr A. P. J. Bénard, a group managing director, has been to mothball about 8% of its capacity outside North America. It sounds small, but Shell has cut capacity roughly three times farther than the rest of the industry in the past year. Some have yet to start on big reductions. Exxon's board is waiting to hear from its trembling affiliates around the world who have been asked to suggest what might be shed. The results will not be known until late in 1982.

Oil companies are still investing heavily in refineries, as well as scrapping old plants, because cheaper natural gas and coal are killing off demand for heavy fuel oil, while the outlook for lighter products like heating oil is better. BP, which has been a laggard in upgrading its refineries, is spending $1.1 billion on plants to refine light oil products.

Even if the oil companies make big cuts in their refining capacity, they will face growing competition from the oil producers. Opec plans a 38% increase in its refining capacity to 7.3m b/d by 1985. Most of that will be exported. Shell, Mobil and other big oil companies are partners with Opec countries in these new refineries which will make even more of their old plants redundant.

*Refinery flexibility in the OECD area, 1979-1985-1990



Each year we publish the **Dollars per Day Survey of the Small Food Store Industry**. We believe this to be the most factually-accurate information available on this industry. The Twelfth Annual Survey will be released in January, 1983, and can be ordered by using the order blank at the end of this report. The following information will be included in this year's survey.

Dollars per Day Information on Gasoline Operations in Small Food Stores

Each year the chains do a better job of reporting gasoline sales. The eleven chains in the survey sold 2,112,975,731 gallons of gasoline last year. The total national market for highway gasoline in 1981 was 99.6 billion gallons (see **What Do the 25 Largest Oil Companies Have to Say About Gasoline Marketing in 1982?**). These eleven chains now sell 2.12% of the gasoline sold in the United States. They sell gasoline in 5,799 of their stores or in 47% of them. If there are 39,000 C-Stores and 47% of them sell gasoline at the same rate as the stores in this survey, small food stores now sell 7% of the gasoline sold in the United States. (Forty-seven percent of 39,000 equals 18,330 gasoline dispensing units. These 18,330 gasoline units sell 1,040 gallons per day or 380,695 gallons a year per unit, with total gasoline sales of 6,958,068,000. These 6,958,068,000 gallons divided by 99,600,000 equals the market share of 6.98%.) Using these gasoline unit figures would mean that the 11 chains in this survey operate 31% of all C-Store gasoline dispensing units.

Most of the chains own their own gasoline dispensing units, but some still don't own all of these systems. In some of the chains, the equipment is installed by a gasoline supplier who makes the investment in the equipment and pays the company a commission for each gallon pumped by the unit. The type of ownership, the source of supply, and the function of the owner of the gasoline operation has a great effect on the margin received from gasoline. In general, more and more operations are making the investment in gasoline facilities and operate their own equipment.

During the year the chains in the survey opened an additional 393 gasoline units even though there was only a net increase in total stores operated of 107. Gasoline represents 32% of their total sales. Gasoline margin probably represents about 15% of the total margin dollars developed by the combined gas and store units when the company owns and controls the unit and the pricing. It represents a far lower percentage of total margin in units that are jobber-run and operate only on a commission basis.

	No. of Stores	No. of Stores With Gas Units	No. Gas Units Added During Year	Percent of Stores With Gas
1974—Fourth Survey	9,258	1,964		21.21%
1975—Fifth Survey	10,143	2,147	194	21.16
1976—Sixth Survey	11,356	2,786	557	24.53
1977—Seventh Survey	11,953	3,792	959	31.72
1978—Eighth Survey	12,597	4,584	792	36.38
1979—Ninth Survey	12,920	5,153	569	39.88
1980—Tenth Survey	13,167	5,630	447	42.76
1981—Eleventh Survey	12,445	5,533	442	44.45
1982—Twelfth Survey	12,400	5,799	393	46.76

TWELFTH ANNUAL DOLLARS PER DAY SURVEY

Number and Percentage of Stores With Gasoline Units

$DPD Profit Ranking	Company	No. of Stores	No. of Gasoline Units	Percent of Stores With Gasoline	No. of Gasoline Units Added During Year	No. of Stores Added During Year
1.	Shop & Go	405	268	66%	5	(–7)
2.	Circle K	1,211	780	64%	27	17
3.	Southland	7,002	2,517	36%	271	107
4.	National Convenience	922	585	63%	107	90
5.	Lil' Champ	162	66	41%	22	14
6.	Dillon	349	250	72%	8	11
7.	Li'l General	460	208	45%	4	(–14)
8.	Mini Mart	114	38	33%	9	2
9.	Sunshine Jr.	354	307	87%	19	1
10.	Conna	434	309	71%	(–5)	18
11.	Munford	987	471	48%	(–72)	(–132)
Totals		12,400	5,799	47%	+393	+107

TWELFTH ANNUAL DOLLARS PER DAY SURVEY

Recap of Important Gasoline Statistics for the Eleven Chains in the Survey

	1981	1982	Increase
Number of Gasoline Units	5,406	5,799	+393
Number of Gallons Sold	1,879,110,571	2,112,975,731	+233,865,160
Percent of Total United States Highway Gallons Used	1.86%	2.12%	+.26%
Average Gallonage per Gasoline Unit per Day	986	1,040	+54
Gasoline as a Percent of Total Sales	30.8%	32.10%	+1.3%
Average Retail Price per Gallon	114.1¢	123.1¢	+9.0¢

TWELFTH ANNUAL DOLLARS PER DAY SURVEY OF THE SMALL FOOD STORE INDUSTRY

Schedule of Important Gasoline Information

$DPD Profit Ranking	Company	Number of Gas Units	Number of Gallons Sold This Year	Gas Operating Days	Average Gallons Sold per Day per Gas Unit	Gas Margin per Day per Gas Unit	Gas Margin per Gallon	Percentage of Sales Contributed by Gasoline
1.	Shop & Go	268	49,000,000	97,006	505	$28.07	5.6¢	30.8%
2.	Circle K	780	230,700,000	279,759	824	N/A	N/A	39.0%
3.	Southland	2,517	956,000,000	869,112	1,100	N/A	N/A	25.3%
4.	National Convenience	585	216,500,000	193,944	1,116	81.47	7.3¢	32.7%
5.	Lil' Champ	66	11,233,996[1]	20,020	561	26.36	4.7¢[1]	24.9%
6.	Dillon	250	93,560,260[2]	91,262	1,025[2]	N/A	N/A	45.0%
7.	Li'l General	208	47,389,000[3]	74,984	632[3]	N/A	N/A	25.7%
8.	Mini Mart	38	7,724,936[3]	12,223	632[3]	N/A	N/A	20.8%
9.	Sunshine Jr.	307	68,700,619[4]	108,578	632	N/A	N/A	54.0%
10.	Conna	309	164,206,200	112,476	1,460	N/A	N/A	42.9%
11.	Munford	471	267,960,720[5]	171,444	1,563	N/A	N/A	54.2%
Totals		5,799	2,112,975,731	2,030,808	1,040			32.1%

Notes:

1. Based on actual sales on 33 company-owned units and 4¢ a gallon commission on commission units.

2. The Circle K price (122.8) was used to compute gallonage from the dollar gas sales.

3. Gallonage estimated from actual dollar retail sales of $85,875,774 divided by Southland's average retail price of 125.0¢ for the year ended December 31, 1981.

4. We have estimated the gallons sold at 632 gallons per day per gas unit, Sunshine Jr.'s average gasoline gallonage. The Southland average retail price for the year ended 12-31-81 of 125.0¢ was used to determine the percentage of sales contributed by gasoline.

5. The actual gasoline gallonage is not stated. We have multiplied the actual number of per day gallons from last year's report by the number of gasoline days operated. Munford operated 72 less gas units at the end of this fiscal year than they did last year.

TWELFTH ANNUAL DOLLARS PER DAY SURVEY

C-Store Gasoline Sales

Year	# of C-Stores	# of Stores With Gasoline Pumps	# of Gas Units	Gallons Pumped per Unit	Total Gallons Pumped	Amount of Highway Gas Consumed—Billions of Gallons	Percent of Market Supplied by C-Stores	Increase	Percent Increase Over Previous Year
1980	39,000	44%	17,160	359,890	6,175,712	101.2	6.10%		
1981	39,000	47%	18,330	379,600	6,958,068	99.8	6.97%	.87%	14.2%

AUSTRALIAN GASOLINE MARKETING

by Ned Roscoe

Note: Ned Roscoe spent July, August, and September of 1982 touring Australia. During that period, he studied gasoline marketing in that country and called on most of the major marketing companies.

Australian gasoline marketing bears a family resemblance to the American market. Many of the names involved are the same, and many Australian stations look as if they had been magically transported from some suburb of Dubuque. It seems that gasoline is gasoline, and there's only a few orthodox and sensible ways to sell it.

A closer look shows how Australian gasoline marketing is quite different from the American species, at least to those in the business. Australian outlets sell petrol by the litre, with full-service and self-service costing just about the same, if not the same price. Credit cards are only occasionally accepted, and then in a kind of experimental fashion. Some say that Australia is like America was years ago: that the reason stations still boast several full-time mechanics is because the Australian economy has yet to make the service station mechanic a rarity rather than the rule.

Australian consumers are "in the business" too. In its essentials, Australian gasoline marketing has the same concerns as American gasoline marketing. The Australian consumer makes choices based on location, value, and attractiveness. His choice is affected by the vagaries of regulation as well as by the innovation of the sellers. In Australia, the former is often extreme and the latter pedestrian.

There are fifteen million people in Australia, on a continent roughly the size of the lower 48 United States. Most of these people (69.8%) live in a few metropolitan centers, with over a third in either Sydney or Melbourne. The rest of the country is dotted with widely-separated country towns, which are connected by roads that are often quite rough.

Australians operate approximately 5.8 million cars and station wagons and approximately 1.5 million commercial vehicles. The Australian fleet looks different from the American fleet, and it's not just that the steering wheel is on the right-hand side of the car. Ten- to twelve-year-old cars are common because new cars are relatively more expensive than they are in the United States. Corrosion is also less of a problem in Australia's warm climate. It's rare to see a very large automobile (called a yank-tank), but just the same, the most common makes are from American designs. Mid-sized Holdens (by General Motors-Holdens) and Fords, and many old Plymouths account for the majority of cars on the road.

Most gasoline is sold at one of the integrated oil companies' branded outlets. Independent chains, in the sense that they are not refiners, are fewer and smaller than their counterparts in the United States. To most Australians in the petrol business, "independent" means a dealer who owns his own stations, not a non-major brand. The market shares of the leading marketers are, neglecting the independent chains, roughly approximated by the Australian federal government's allocation of indigenous crude to refiners/marketers:

Shell	25.29%
Caltex (with Golden Fleece brand included)	18.43%
British Petroleum	16.88%
Mobil	14.88%
Ampol	8.51%
Esso	6.80%
Amoco	5.47%
Total Oil	3.47%
	100.00%

Shell's dominance is plain to see. What is striking about it is that Shell has about half as many stations as British Petroleum. Shell executives attribute their success to both their expertise at choosing locations and their bold innovations. Shell introduced self-service to Australia in 1975; they were the first to make a widespread conversion to modern pumps; and Shell men claimed to be the first to "look upmarket." Shell leads the way in the acceptance of Bankcard, a national credit card, for petrol purchases. Whenever the government or the press needs a spokesperson for the industry, they go to Shell. Most significantly, other brands look to Shell for leadership. One Mobil executive explained his company's pricing policy: "We match Shell."

Australian Shell executives occasionally claim to be "more professional" than American marketers. They acknowledge that most ideas come from the States, so in some sense "professional" must mean "provincial." An Australian Shell outlet, though, is one to be respected. Its mechanics are certified to be trustworthy and skilled by the Autocare program. The selection of aftermarket items may include up to 3,000 items. Moreover, from the executives to the dealers, the whole organization exudes confidence.

A typical Australian gasoline outlet offers a wide range of products and services, especially in rural areas. At one station you might find some or all of the following: up to twelve nozzles, four service bays, an automotive accessories shop, a restaurant (called a "roadhouse"), snack bar (for "takeaways"), and a car wash. Despite that vast array, executives assert that "we're in the business of selling petrol."

The business of selling petrol is complicated by a host of government regulations. Australians call their land the "Lucky Country" for a variety of reasons, but none of these reasons includes the government's role in the gasoline trade. Wholesale prices must be approved by both federal and state officials. In places, dealer margins are restricted by regulation. In the state of Victoria, where Melbourne is located, gasoline sells at the legal maximum of 43.9 cents per litre—about $1.76 per gallon.

Operating hours are restricted in most of the states. In Adelaide, capital of South Australia, you have a tough time getting petrol on a Saturday afternoon or anytime Sunday. Some stations have coin-operated pumps, but most are just plain closed. You must find one of the few licensed stations or go out of the metropolitan area to find a station that is really open. In urban areas of Western Australia, dealers are allowed to sell gasoline on weeknights or on the weekend only if it is their turn on the local roster. Dealers without a roster spot for a certain date must close at the end of the mandated trading hours or face severe punitive action.

Most dealers enjoy this occasional monopoly. Each and every dealer who belongs to the chamber of dealers gets his chance to have the market all to himself once every other month or so. When his turn comes, the dealer charges accordingly: which means five or six cents per litre above the normal hours price.

Strangely enough, Australians don't seem to object to a system that causes them inconvenience and higher prices. They tend to see it as a necessary evil rather than as an injustice. In fact, many consumers favor the roster system out of sympathy for the dealers. After all, by law the dealers must pay extra for after-trading-hours labor. This is typical of how Australians often lack faith in the market to resolve price and supply problems. Instead they accept a high number of poorly-run stations, higher prices, and market turmoil.

The lack of faith surfaces again in a malignant nationalism. Many Australians worry that America's superior economic development works to their detriment. Oil refiners soothe these worries by advertising what a good citizen so and so multinational is, much as it is done in the United States except with a pro-Australian theme. The companies want to avoid more hate and hassles by being accepted as contributors to Australia. Their efforts are often unappreciated. Even Ampol, an Australian refiner that has painted THE AUSTRALIAN COMPANY across its buildings and ads, is occasionally attacked as just another American company. And, as in the States, oil companies are prime targets for cliché-wielding politicians. The only difference is that, if this is possible, in Australia there is even more ballyhoo against the companies and less reason behind it than in the United States.

None of the companies advertise their petrol, even though that is supposedly the focal point of the business. Instead, they advertise lubricants and tie-in items from the accessories shop. Ampol advertises that it is more than a petrol station, and despite the pronouncements of most executives, that is really true of the whole industry. They may be refiners and marketers of petroleum products, but in the community they serve a larger role, whether they know it or not.

The gasoline itself is homogenous: it is shared from each refinery on the basis of refinery exchange and borrow and loan agreements. For example, the gasoline sold in Western Australia comes from British Petroleum Kwinana refinery. Brand loyalty persists despite the homogeneity. Why it should exist at all seems to be a mystery, even to the marketing executives. I asked several why a customer should consider their outlets as better than those of any other brand. Some immediately accused me of spying for trade secrets. I explained that I just wanted to be sold on the merits of their brand, like any other consumer. This made the marketers flounder. Shell men pointed to their market dominance. Others said "location" or "price." One Esso man even told me that I should prefer not to stop at Esso in Victoria because they had a "poor image factor" due to their small market share.

These executives may be marketers but not salesmen. They fail to convey any sense of a significant, conceptualized market offer, except in the case of one independent who seemed to have a low-price, high-volume plan. The only really convincing offer I ran across came from an area manager who just happened to be in the office. He said his successful stations are those where the public knows and appreciates the dealer and his personnel. In his experience, certain dealers are responsible for vast improvements in their stations sales because they keep the station clean and well merchandised; because they are friendly, helpful, and respected in the community. He assured me that most of his stations were worth coming back to.

In its essentials, good Australian gasoline marketing is the same as good American gasoline marketing. On a unit-by-unit basis, success or failure is determined by value (which includes location as a transaction cost), service, and attractiveness. Shell's leadership may in part be due to the motto that Shell executives neglect to mention: "Service is our business." It is emblazoned across their stations.

Australian oil companies are constrained in dealer relations by the franchise laws, which are similar to those in the state of Maryland. The companies are in the process of divorcing themselves from most of their company-operated stations. In a metropolitan area, a brand is limited to a dozen or so company-operated stations. Politicians, such as the nonsensical Senator Chipp, complain that this is not enough. The law mandates that dealers obtain franchises for three-year periods with two guaranteed options to renew. As a result, companies select their lessees with a great deal of care.

Dealer quality has also improved with the increase in average volume per outlet. An average outlet now pumps 40 to 60 thousand litres per month where it once pumped only 10 thousand litres per month. The stakes per station have increased thanks to a reduction in the number of stations through a program of "rationalisation," also called "Voluntary Disinvestment." Whereas companies once took mechanics and made them dealers, they now search for "capable businessmen."

Capable businessmen, though, seem to have a low status as far as some marketing executives are concerned. In many cases, dealers have an adverse relationship with their supplier. In one office I asked what kind of a person becomes a dealer. The three executives laughed when one answered "a dickhead." Neither one of the others bothered to correct him. Just the same, oil company ex-employees often take the chance to become a dealer. Movement in the other direction is unheard of.

The third alternative, besides company-operated or -leased locations, is the dealer-owned outlet. These are branded by agreement, just as in the United States. In comparison to the United States, jobbers (owners of several stations) are still rare, though their number should increase after divorcement is complete.

Since indigenous crude is less expensive for refiners, there is an incentive to run a refinery at a higher output than may be called for by his own needs and obligations. This excess is sold to the independents. Since the independents (both chains and station owners) incur few costs to the refiner, their purchase price is lower than that of most stations. This advantage enables independents to offer full service at the same price as self-service, something that Australian consumers seem to appreciate, and it puts the squeeze on dealers who lease their stations.

Competition is so intense that companies sell locations only after the tanks have been filled with concrete. However, this competition has to deal with frequent supply disruptions. Australia is prone to strikes and slowdowns. In the refined oil business, two major disputes per annum are normal. As of this writing, motorists in Sydney line up on even and odd days to buy the maximum of $5.00 of gasoline per purchase. Many stations are completely sold out.

Recent developments in Australia include the introduction of American-style convenience stores. Most of these are located in the two major metropolitan centers. Shell has opened Shell Brand

Food Stores, with limited success. Mobil has combined with the Australian 4-square supermarket chain to produce a similar outlet. Caltex/Golden Fleece plans to have 39 Majik Markets open by the end of 1982. Even though prices at these outlets are higher than those at grocery stores, the petrol-convenience stores project a slightly lower price image than 7-11, the only other 24-hour store.

Convenience stores are difficult (almost impossible in most places) to open because of the restriction of local councils. It takes considerable persuasion to have the trading hours restriction waived and considerable amounts of land to provide the required amount of parking. British Petroleum, which appears to have a success with the "Food Plus" chain, has found its joint venture with Conna stalled by several local councils. The troubles and requirements make some executives doubt that the concept is feasible in Australia. Some proclaim that the traditional style outlet will still provide a higher return on investment than the petro-food outlet.

Throughout the market, there is a feeling of crowding and limits. Several marketers told me they were working in a dying market. Caltex's acquisition of the Golden Fleece Chain (which has been very successful in the roadhouse business) was an attempt to find a profitable market share without increasing competition. Any advertising that might expand the market would be wasteful for any single company and would appear socially irresponsible to boot.

It is a tired market. The problems here, as in the United States, seem both dull and hard to solve for the participants. That the principles of petrol marketing have been learned completely by all sides seems to be the spirit. Many participants see little opportunity for substantial growth or profitable change in the business.

But what is the business? Is it service? Is it simply petrol? Shell has shown through the Autocare program that dealers can be assisted to a higher level of quality. It remains to be seen, though, what "the business" really is.

The business is probably more than petrol at the right location. How much more, and how well, given the government's repressive attitude towards change, is being tested very cautiously.

So, like America, there are ideas to be thought of and hard, unit-by-unit work to be done. Most of the industry seems to look to Shell and the United States for leadership. Here in Australia, where not every boy has the chance to grow up to be president, there's a belief that not every company has the chance to become the industry leader, even in ideas if not market share. That is unfortunate, both for their shareholders, wherever they may be, and for the Australian consumer.

EDITORIAL

Sally Roscoe

The 25 largest oil companies have little to say about gasoline marketing. It's as if the companies do not realize the importance of gasoline marketing. This is unfortunate for the oil companies because without the consumer, the oil companies cannot survive. During my summer work with retail outlets, I have learned the importance of buying commitment. I have been taught that it is important to sell yourself first, your family second, your friends and neighbors third, your business associates fourth, and strangers fifth. In going over the above list and reviewing the annual reports of the twenty-five largest oil companies, my major questions are: Where do shareholders fit into this buying commitment ladder? Are the oil companies interested in our business or are they merely interested in our continued subsidization of their exploration projects?

I think that it is necessary for oil companies to redefine their purposes and goals. What is the role of oil companies in the United States in 1982? Do the oil company executives honestly perceive that the oil company's purpose is to explore for more oil and to continue to shut down more refineries as consumers continue to follow energy conservation? Sure, oil companies should continue to explore (which it appears they find more glamorous), but they must also develop an intense marketing strategy. True, many oil companies do use television, radio, and magazine advertising to promote their gasoline, but point for point, the oil companies seem to stress the importance of exploration and production rather than marketing. In addition, a good part of the gasoline advertisements are for conservation, which seems to contradict the purposes of the oil business. This is odd considering that when someone asks the man on the street about oil companies, he thinks of gas stations—not exploration or conservation.

As a consumer I am more interested in the service an oil company can provide through its retail outlets rather than where it is going to find the oil. As a stockholder, I am more interested in knowing what the oil company is doing to improve sales—and thereby my shareholder's check. As an oil director, I would be more concerned with how my company could improve marketing enough to warrant the reopening of closed refineries. The annual report is a perfect vehicle for this message. Oil companies need to sell their shareholders so that the shareholders will develop a buying commitment and share it with their families, friends and neighbors, and business associates.

Many oil companies are taking small steps to improve their marketing strategy, but no one company really stands out. Some companies are using catchy advertising slogans, others are adding convenience stores to their stations, and still others are improving their car care services. There is a billboard advertising "The Lean Machine Gasoline." This billboard looks clever, however, it does not really tell the consumers why they should buy that particular brand. Adding convenience store outlets to service stations encourages consumers to go there so that they can do their weekly shopping and get their gas at the same time. Car care service is a timely idea as more women return to the job market, and they don't have the time or the knowledge to service their own cars.

As a female consumer, I demand a lot from a service station. I want fast, friendly, helpful service in a clean station that offers more than just gas. If I can get gas, oil, and that funny sound in my engine taken care of—and pick up some milk and eggs at the same place, I would shop at that place rather than driving around to three different retail outlets and spending more time. The stations need to supply products for consumer's daily needs. It may mean oil companies need to have less outlets but must modernize the ones they have and give better service.

I want to know about that great place down the street with all those services so that I do not waste my time through ignorance. Almost everyone wants a better deal and if oil companies evaluated their marketing performance, improved it, and told the consumer, then the the oil companies would achieve higher sales. Not every oil company, however, is going to be smart enough or adventurous enough to want to go through this process, so few will succeed.

The oil companies should spread their hype and enthusiasm for exploration and production over to marketing. Sure, it is exciting to hear about the exploration adventures, but wouldn't the shareholders (and thus the oil companies) benefit more by hearing how great the service stations are and what the oil company is doing to directly make life better for the shareholder?

How to make the United States energy independent, revitalize the automobile industry, create sleepless nights for oil executives, reduce the strategic importance of the Middle East, cause oil company shareholders to jump from the Chrysler building, end unemployment, eliminate the need for the Strategic Petroleum Reserve, make southern California smogless, abolish the Department of Energy, and attain other high and lofty objectives.

Submit an order for 120,000,000 (120 million) cars like the Honda Civic that are made in the United States and attain an average of 51 miles per gallon.

Pertinent Information:

In 1981, the average miles per gallon for 120 million passenger cars was 15.54 miles per gallon.

The total consumption of gasoline for highway use in 1981 was about 100 billion gallons.

The 1983 Honda Civic and several other cars have a combined EPA rating (highway and city) of 51 miles per gallon.

An increase of 35.46 miles per gallon reduces the 100 billion gallon U.S. gasoline market to a 30 billion gallon market.

This 70 billion gallon savings would reduce total U.S. oil consumption by 31%. During the first 5 months of 1982, the United States imported 25% of the total oil it consumed.

Other Interesting Information:

An increase in average miles per gallon from 15.54 MPG to 16.54 MPG reduces gasoline consumption in the United States by 6,000,000,000 (6 billion) gallons.

The average price paid for gasoline in 1981 in the United States was $1.35. (This figure would be less for regular.)

The savings on 70 billion gallons of gasoline per year would be 94 billion dollars.

The United States imported an average of 5,401,000 barrels of oil at an average price of $37 per barrel in 1981. Annualized the United States spent $73 billion for imported crude.

Motor gasoline was 44.5% of total petroleum product use in 1981.

The average age of cars on the road in the United States in 1981 was 6.5 years.

The sticker price of a 1983 Honda Civic (made in Marysville, Ohio) is $6,238 (cheaper in 120 million quantities).

The cost of 120 million new Honda Civics at sticker price is $749 billion. On fuel savings of $94 billion annually, it would take 8 years to amortize on the fuel savings.

The average passenger car in the United States was driven 9,026 miles in 1981 and consumed 581 gallons of gasoline.

A Honda Civic driven 9,026 miles would consume 177 gallons of gasoline. It would use just 30% of the gasoline that the average car on the road now uses.

In 1978, the year of the largest car production, Americans bought 11 millior cars. At that rate, it would take 11 years to produce 120 million new Honda Civics.

Eight times as many workers are employed in automobile production as in the oil industry.

Major Flaw in This Idea:

The price of oil, and thus the price of gasoline, would plummet on the signing of the order for 120 million Hondas, and it would wipe out the savings.

What would happen if we bought 120,000,000 (120 million) new Honda Civics or some other car that averaged 51 miles per gallon of gasoline?

Gasoline consumption, and thus oil consumption, would drop so that we would not have to import any oil.

The price of oil would drop to a fraction of its present level.

The oil companies wouldn't have to pay any windfall profit taxes.

We wouldn't have to worry about rich Texans and wealthy Arab sheiks.

We wouldn't have to spend a trillion dollars arming ourselves to fight the Russians over Mideast oil.

We could be nice to the Arabs because we liked them, not because we want their oil.

The price of things made from oil would decline. It would cause a realignment of the cost of everything in our society.

Forbes Magazine would have to revise their list of the richest 400 Americans.

We wouldn't have to fill the Strategic Petroleum Reserve.

What kind of a car you drive would no longer be a topic of conversation or a measure of your worthiness.

Oil company executives would no longer have to be world statesmen.

You would spend 7 hours less at the gas station each year. That's how much time you save buying 177 gallons versus 581 gallons a year.

The bridges in the United States wouldn't have to be widened.

Unemployment in the United States would be at an end. Everyone who wanted to work could be an automobile worker.

Refiners would only have to produce one grade of gasoline. Retailers would only have to have one tank.

Retailers wouldn't have to post so many gasoline prices. California (at the least) is suffering from numerical overdose.

Dan Lundberg could be an actor again or maybe run for public office.

There'd be no rich Greek tanker owners for pretty American girls to marry.

There'd be more places to park. Smaller cars would mean more spaces.

The cost of all energy would go down. Even the public utilities would reduce their prices. Bring back Reddy Kilowatt.

You'd have to take the kids to visit Grandma on your summer vacation. There'd be no excuse for not driving across the country.

There'd be less pollution. We wouldn't have to listen to as many clean air harangues.

Travel and resort areas would flourish. People would perceive they could afford to drive to them again. We could all go fishing.

We wouldn't have to buy books on energy shocks and the doomsday people might be quiet for our lifetimes.

There'd be less smog in L.A., and the rest of the country would move there and leave us alone.

HIGH MILEAGE CARS WILL SOON BE THE STANDARD

There has been a movement toward higher mileage cars in the United States for some time. Because of recent technological improvements in automobiles and the increased cost of gasoline, the time table for this change has been shortened. The last dramatic increase in gasoline costs made most American drivers conscious of the benefits of higher mileage cars. The trend is in motion and will continue until another dramatic event changes consumer perceptions. Cars that attain greatly increased miles per gallon will be purchased by most automobile purchasers. Only the timing of these purchases is at issue.

The buying public is much smarter than some businessmen believe. Consumers know when they are well served and seem intuitively to compute and take actions when the results are beneficial to them. The average car now in operation is over six years old and gets very low miles per gallon by new-car standards. However, it is paid for, and there is low social pressure to go into debt to purchase a car for status reasons. Consumers make cost/benefit calculations on a regular basis. Interest rates are a big factor and if they go down, it will change the results of the calculations for many prospective purchasers.

Each year the attainable miles per gallon on new cars is being increased. The combined mileage rating on the Honda Civic increased from 47 to 51 miles per gallon between the 1982 and the 1983 model years. It will undoubtedly increase again with the 1984 models. A four mile per gallon upward movement in the fleet average causes a 20 billion gallon annual decrease in gasoline consumption at today's gallonage.

It was interesting to note that when we asked about the price of the Honda Civic, the dealer said it could be delivered for about $300 premium over the sticker price. Compare that to the 1983 Cadillac El Dorado that lists for $26,800 and can be purchased for $21,400. (The combined EPA rating for the 1983 Cadillac El Dorado is 17—highway 27, city 17.)

There is always the tendency to extrapolate things too far into the future. Something happens or someone changes things. Neither higher mileage cars nor lower oil prices are good news for those in the oil business. If oil prices stay high, the pace of change will increase. If oil prices drop, revenues will be reduced. Unfortunately, the most likely scenario calls for a steady movement toward higher mileage cars, reduced gasoline demand, and thus lower oil and gasoline prices. The events have already occurred, and the technology is already in place. It will be interesting to watch the changing energy needs of America.

EDITORIAL–OCTOBER 1982
John Roscoe

Is the Oil Business a Growth Business?

Not in the short run at least. In both dollars and units there will be decreases in the size of the numbers. Through 1981 the increased price per unit helped conceal the declines in real volume. The trend toward energy efficiency and conservation is so strong and the potential savings from rational actions so great, there will be a steady decline in the consumption of petroleum.

Will Gasoline Lead the Way?

Yes, but there will be energy savings in most areas of our lives. Some of the savings will be made from simple things like turning off electric lights. Some of the savings will come from technological changes that require capital expenditures. Price has affected how we feel about energy consumption. The recession has heightened our awareness of the need to change and conserve. There is an attitudinal change underway and the end of the recession will not bring back the per capita unit volumes of yesterday.

Gasoline consumption will have the fastest change. When the rewards of buying a new high mileage car exceed the costs of keeping yesterday's car, we'll see greatly reduced consumption. The die is cast.

What Will Be the Major Cause of a Reduction in Demand for Gasoline?

More efficient automobiles. All new cars use less gasoline. It is hard to believe that in 1981 the average passenger car in the United States (of which there were 123 million) attained an average miles per gallon of just 15.54. To date, this figure has increased only 2.44 miles per gallon over the 1973 average. That's because the average age of cars on the road is 6½ years (the average car is a 1975 model).

What Kind of Mileage Do New Cars Attain?

Chrysler's 1982 corporate average was 28.4 miles per gallon. The 1983 Honda Civic and several other vehicles achieve city and highway averages of over 50 miles per gallon.

What Would Happen to Gasoline Consumption if the United States Fleet Average Attained Chrysler's Corporate Average for 1982?

If the entire U.S. passenger car fleet were to achieve 28.4 miles per gallon in 1982 and all other factors remained constant, we'd have a 56,000,000,000 (56 billion) gallon gasoline market. That would be a reduction of 44,000,000,000 (44 billion) gallons from 1981. At last year's prices, about $59 billion less would be spent for gasoline. Contemplate what this would do to the amount of money available for exploration, production, and refinery modernization.

Sure. We are not considering time, consumer preference, consumer awareness, personal lifestyle and affluence, availability of vehicles, capital availability, pickup trucks and vans, and the number of miles actually traveled. We've taken an admittedly simplistic approach, but no one is ever given perfect knowledge. A lot of decks are about to be reshuffled. The tide has changed. Given present conditions, future technological improvements and a return to prosperity, I wouldn't rule out a 50+ miles per gallon national vehicle average in my lifetime.

What Convinced You There Was Too Much Oil?

I read the current topical book on the subject, **Global Insecurity: A Strategy for Energy and Economic Renewal** by Daniel Yergin and Martin Hillenbrand. The case they make for continued storage and a third oil shock convinced me the energy problem will be one of over-supply, not one of storage. Only the force of government can make an energy shortage in the next twenty years. We are in for some tough years in gasoline marketing.

Why Did You Include the Article from The Economist, of December 19, 1981?

Because the article is pertinent and that viewpoint is not generally recognized. The magazine generally has a clearer perspective of our problems than we do.

What Do You Think Will Happen to the Price of Crude Oil?

Absent government intervention (how can one even suggest the government won't intervene), the price of crude oil must decline. No cartel has ever lasted. One barrel of oil too little and we have a shortage, one barrel too much and there is price pressure. Prices are set at the margin. To date, all domestic producers of oil have been able to sell every barrel of production. When the first barrel of domestic production needs a buyer, oil prices will decline.

Won't Utilities Take Up Some of the Slack?

Utilities are more store-blind than oil companies. They have excess capacity and don't recognize it. I'm only mentioning it because electric consumption will decline for the first time this year, and I'm considering a report on this industry.

What About Government Intervention in the Oil Business, and How Do the Oil Companies Feel About Government Intervention?

About like everyone else. They are against it when it hurts them, and they are for it when it helps them. It's made for some good years.

It's hard to for anyone to be pure about this. In free markets, there has always been over-supply. When over-supply conditions exist, businessmen tend to try to use the force of government to keep competition from hurting their interests. Only government action can create an oil shortage. Prices, profits, and return on equity are all better in times of short supply. Keep your ear tuned for industry leaders advocating government intervention for high moral purposes.

How Much Does an Increase of 1 Mile per Gallon Affect Gasoline Consumption in the United States?

If all other factors remain constant, and they never do, it would decrease consumption by 6 billion (6,045,000,000) gallons. If the average miles per gallon had been 16.54 instead of 15.54 in 1981, we would have used 6 billion less gallons of gasoline.

What Would This Affect?

Everything. It will surely have an effect on oil company economics. It will also change many relationships in the entire economy.

Are the Oil Companies in Trouble?

Are you kidding? Last year I said rich folks can afford to be foolish longer than poor folks. The major oil companies are very rich folks. They have lots of assets that give them lots of time to change.

In reading the reports of the smaller companies, it is obvious that they are making changes fairly quickly. It's also obvious that they are going in a different direction than the top ten companies. To date, most of the volume losses have been taken by the top ten companies. Most of the service station closures have been made by them. It's obvious that different-sized companies are reacting to change in different ways.

What Would You Do If You Were an Oil Company?

I don't know. We've had a sea change, and no one can stand against the tide. I have enough problems just being a gas marketer.

Let's Talk a Bit About Gasoline Marketing. What Happened to the Service Station Population During the Year?

The 25 refiners in this report operated 191,712 stations at the end of 1981. That is a decrease of 11,647 stations over the previous year. The small food store industry increased the number of gasoline units they were operating by about 1200 gasoline dispensing units.

What About Annual Reports This Year? How Did They Look?

There was a 33% increase in the space devoted to gasoline marketing. Total annual report pages declined by 1%. I predict more station pictures in the years ahead as the oil companies begin to worry about selling things.

Are Oil Companies Unique?

Apparently. In the annual reports, almost all companies believe they possess unique competitive advantages. All are well positioned to meet formidable challenges. All are established leaders in production, marketing, and distribution. Most are cost effective, efficient, and close to market. Almost all had a far higher refinery utilization rate than the industry average. Most either have or are diversifying into non-energy related businesses.

Isn't the Ability to Refine Sour Crude and Produce Higher Value Products the Right Step?

It must be. The entire industry is doing it. Maybe it's the entry fee for survival in the business. The companies need to know that all other oil companies are also closing or modernizing their refineries to meet "current and expected reduced sales levels" (Amoco Annual Report?).

How Will Gasoline Be Sold in the Future?

Some day most gasoline will be sold on a completely unattended basis. Payment will be made by either cash, debit, or credit cards, and the transactions will be handled entirely by machines.

Are Car Care Centers Necessary to Sell Gasoline?

I don't think so. It may be a nice business, but it's another business than the marketing of gasoline. It's also a very difficult business. Why does it seem so important to the oil companies?

What Have Been the Major Developments in Gasoline Marketing in the Past Year?

There has been a lot of jerking around. It's hard to remember them all, and they all seemed so important and so significant at the time. Remember rebates, cash discounts, credit charges, declining volumes, weekly price increases of 1¢ a gallon, increased full serve/self-serve differentials, generic gasoline, increased oil company advertising, chinese gasoline, higher unit volumes, less units, increased vapor recovery costs. And, oh, didn't someone give away glasses again?

What Do Farmers and Chemical Engineers Have in Common?

Production, man, production. They both are specialists in bringing forth the bounty of the earth. Both would rather not worry about selling the fruits of their labor.

What About Arco's Actions?

In gasoline marketing, any bold move is refreshing. You've got to hand it to them. They've cut out credit cards, reduced the cost of the product to the dealer below that of their competitors and increased the number of their AM/PM markets. They cut their 1981 refining capacity by 25% and increased their station gallonages. In doing so, they increased their refinery utilization rate to 100% in the second quarter of 1982.

I considered giving them a Gasoline Marketer of the Year Award, but couldn't bring myself to do it. Their 6-month report states their total gasoline volume in that period of 1982 was up just 16.5%. Given their present dealer price advantage, they should have doubled gasoline gallonage.

Apparently, you still can't make 7,122 silk purses out of 7,122 sows' ears. In their AM/PM division, I find their units understored and undergassed. The rewards will go to the companies that provide the cheapest, most efficient way to supply product on a volume basis. Arco has been bold, brave, and innovative and is to be congratulated for trying. It's doubtful they've been bold, brave, or innovative enough.

Does the Vision of a Future Shortage Hold Down Gasoline Prices?

You betcha! There is a strong feeling among a significant number of gasoline retailers that if they can just hold out until the next gasoline shortage, they'll really make it. Between now and then, they will play musical chairs with their retail pricing to try to insure they stay in business and have a high base-year allocation.

What About Charging for Credit Cards?

The move to charge for credit is healthy. It's another move toward market segmentation that can improve gasoline margins. Arco will soon learn how fickle the cash customer can be. Company credit cards bind the customer to the station flying the card. Cash allows the customer to live his life without intimidation and go to the marketer down the street when he is 1¢ cheaper.

Is There Opportunity in Gasoline Marketing?

Wow! Is there. It's a massive business, and it's going to remain a massive business. The marketer who can gain the most efficiency, create the greatest aggregate value to the customer, and make the purchase of gasoline as pleasant as possible, will do well.

1981 EDITORIALS

We liked last year's editorials so much we've decided to include them again in this year's report. We think we said some things that still need to be considered, and it keeps us from having to say them again. These comments were written in August, 1981 and provide some basic background concerning the gasoline marketing environment and how we felt about it at that time.

EDITORIAL – 1981 REPORT

Ned Roscoe

These 25 companies say little of substance about gasoline marketing. There is a myriad of other activities that receive more attention than gasoline marketing, some of which are more interesting. However, marketing is the step that counts; unless someone pays for the product, the whole process is for nought. These companies seem to take gasoline marketing for granted.

It's a safe bet that all of these companies consider themselves to be excellent marketers. Remarks like "We are traditionally strong in marketing," or "We are known as marketing pioneers" are quite common. The problem with these claims is that successful pioneers should report more profitable records than the rest. Although some of these companies are more profitable in marketing than others, it is difficult to identify any outstanding ones. This might be because the marketing environment for their products has changed, while most of them are trapped in the traditional gasoline marketing mold.

The average outlet today pumps about 40,000 gallons a month. In order to be profitable, the average outlet probably needs to pump 100,000 gallons per month. This probably cannot be done with the traditional marketing method. With the traditional method, maximizing gallonage and margin is very difficult - if it were otherwise, these companies would have done so. From a consumer's standpoint, the average service station now looks old and tired. Some people say this has happened because the process of creative destructive and construction stopped with the Arab oil embargo.

Why don't the large refiners change the way they market gasoline? There are several reasons why these companies could have overlooked opportunities in gasoline marketing:

1) When you have tens of thousands of stations, it costs a lot of money to make a sweeping change. The companies are in the unpleasant situation of either maintaining the old costly method, or making a large investment in a new marketing method.

2) Marketing tends to get short shrift from top management. Top managers tend to have backgrounds in engineering, geology, or finance. They might neglect marketing because it is out of their ken, or because they believe that it is a simple, intuitive operation. (Profitable marketing is not simple. Neglecting it is as foolish as letting someone prepare your tax return simply because he can do addition.)

3) Upstream profits are traditionally acknowledged to be larger and easier to make than downstream profits. It's natural for a company to concentrate attention on the greatest opportunities. In this case, that would explain why the annual reports say more about exploration and production than about selling the product.

4) Over the last 60 years, many marketers have developed a bad case of store blindness. Marketers have become so accustomed to their own way of doing business that they don't see the problems with the traditional method of gasoline marketing. The existing method is seen as the only possible and the most feasible method.

5) For most of the last ten years, refiners could sell all of the gasoline that they could produce. Government intervention, through price controls and regulations, and Mideast politics, restricted the supply of gasoline to consumers. It was a seller's market. There was no need for heroic marketing efforts.

6) The station building boom of the 60's left the majors with more outlets than can be run profitably today. That situation gives the impression that there is too much marketing effort instead of too little. Actually, operating that many stations is the wrong kind of marketing effort. Unfortunately for the refiners, just closing stations and adding high octane unleaded will not solve their marketing problems.

7) Innovations rarely come from established groups. Even if one maverick marketing vice-president decided to propose a radical change in gasoline marketing, he would have trouble convincing the appropriate committee that it was a worthwhile investment. After all, if it is a radical idea, it probably hasn't been tried. If it hasn't been tried, there are no results. Without results, there is no proof that it will succeed, and so, it is a risky investment. Maintaining the status quo is much easier.

8) Companies that advertise about the need for conservation and alternative sources of energy seem to contradict themselves if they try to be effective gasoline marketers. In general, marketers need to sell more gasoline in each unit. However, achieving that goal seems to require that these companies encourage consumption. That would appear to be socially irresponsible, and detrimental to their public image.

9) Some of these companies could be afraid of their dealers' reaction to any sweeping change. The dealers have shown in Maryland that they can be a powerful political force. This may or may not be a real danger since the dealers who have the greatest objections probably aren't doing very well with the present methods. Otherwise, the refiner wouldn't think about closing the station. Any dealer that objects to an improvement of his station, has far more serious problems than just his relationship with the company.

It is difficult to become a good marketer, and more difficult to remain so. The problem of marketing can be solved only by those with the authority to commit resources to change. To do that, the company should decide what business it is in; or what role it wants to play in the economy. Many of these companies define their business as "energy" or "producing energy". A good gasoline marketer *supplies* energy.

Some of these companies might decide to get out of the retail gasoline business in order to avoid future losses. A company may decide that it is more profitable to have someone else sell the product, like Tosco does. It might do this because the business could become even tougher in the coming years than it has been for the last decade. There are several trends:

1) Consumption could decline even further because of the impact of more fuel efficient automobiles on the roads. In 1965, the miles per gallon for the U.S. fleet of motor vehicles was 13.5. By 1980, the fleet average climbed to 14.29 miles per gallon. Since the mpg rating of the average new car is above that, there is a far greater potential for conservation than has yet been realized. As long as the American public perceives a need to conserve gasoline, this trend should continue. It will be balanced by the large numbers of buses and trucks that contribute to the low fleet average.

2) Deregulation spurred oil exploration and production. That will increase the future potential supply of gasoline. [Greater production will also cause crude oil prices to begin to stabilize, or depending on inflation, consumption, and the amount produced, even decline.] That will increase the likelihood that the nation will have an adequate refining capacity. What all this means is that there will probably be an ample supply of gasoline in the near future, if the free market continues.

3) In a free market, supply equals demand at the market price. When the price is held below the free market price, the demand exceeds the supply. This happens when there are price controls. When controls are lifted, supplies increase to match demand, and the market price adjusts until there are no longer any shortages. Then, the sellers no longer have the advantage. The best thing that could happen to the refiners is the reimposition of controls on retail gasoline prices. The best thing that can happen to a gasoline marketer is a massive disruption in crude oil supply, (as long as *he* can get some gasoline).

4) Refiners are upgrading refineries in order to produce up to 25% more gasoline per barrel of crude. Since gasoline is the most profitable product out of crude, there will be an even greater supply of gasoline available in the future than there was in the days before controls and embargos.

5) If the windfall profits tax is indeed reduced, crude oil producers will have additional incentive to try to increase the amount of gasoline that is sold, in order to make upstream profits. Marketing subsidies have already returned. This will make the gasoline market become even more competitive.

A more competitive market means that in order to make their gasoline marketing profitable, some companies will have to learn how to compete more effectively. Others will revive traditional methods of gas marketing, such as gas wars, games, and advertising, in order to solve the marketing problem. The great opportunity in gasoline marketing springs from this tendency of most companies to try to relive the past. This tendency might increase consumer acceptance of a new approach because the new approach would be novel.

Although I have no crystal ball, it seems to me that gasoline marketers should try to incorporate elements that make retailing sense. They should eliminate other elements. Credit cards can be of vital importance, just as they have been for years. An emphasis on quality, value, and service throughout the retail operation will persuade customers that some company's operation provides a good deal for them. Gasoline marketers who examine their present retail offer might decide that the gasoline outlet cannot compete with an auto parts store when it comes to selling tires, batteries and accessories. Even though auto repair services are traditionally part of the service station, it is possible that these services are neither profitable nor good for the station's image.

Instead, the gasoline marketer should figure out that he serves people, not automobiles. Gasoline outlets can supply the daily needs of the people who live and work around it; instead of just the needs of their cars. Besides that, a marketer who combines gasoline with the other products that people want on a daily basis can capitalize on automobile traffic. Thus, a complete retail offering that includes gasoline can benefit both the marketer and the consumer. As an added benefit, the gasoline outlet can bolster the company's image rather than detracting from it.

The decision to market is most effective when it is made by top management. Of course, in order to achieve this marketing ideal, top management must delegate enough authority to make the concept a profitable reality. Marketing staffs must be instructed and allowed to be bold and innovative, as well as cost-conscious. These staffs should be required to produce more results than market studies. Marketing is too important to get bogged down in corporate politics.

EDITORIAL – 1981 REPORT

John F. Roscoe

After reading the annual reports of the oil companies, the trade material on gasoline marketing and compiling this report, I have the following thoughts on gasoline marketing.

What do the oil companies say about gasoline marketing in their annual reports?

Nothing! They say nothing. It's an amazing business. This is a product that evidently sells itself. Seek, find, refine and thou shalt be rewarded. Smart, educated, aggressive, adventurous people are engaged to go to the ends of the earth to find crude oil, so that it can be refined to keep the lights of the world burning brightly. This is cast as a moral and socially responsible activity. God loves those who search the darkness to provide help to others. These men are sent out by chemical engineers. The chemical engineers have assumed the mantle of oil company management. Then an obscure marketing staff, none of whom are destined for top corporate leadership, sells gasoline to a complaining public at retail while trying not to lose too much money in the sales function. This is a socially irresponsible activity, since it involves consuming precious crude that really ought to be saved for future generations. Let's not talk about marketing.

How many places sell gasoline?

No one seems to know for sure. Probably a lot more than anyone wants to think. The 25 refiners in this survey say they operate 200,000 stations. It will be interesting to compare this to the figure they report next year.

How many places should sell gasoline?

As many as can make money doing it. A smart fellow a few years ago said a chain operator shouldn't operate any money-losing-units. As costs rise and we have better accounting, I suspect a lot of additional units will be closed. Until then, as they say, "Rich folks can afford to be foolish longer than poor folks".

In a 100,000,000,000 (100 billion) market, the gallons per unit per month break out as follows:

Number of Gallons per Unit Per Month	Number of Stations
25,000	332,000
50,000	166,000
100,000	83,333
200,000	41,666
250,000	33,000

The number of high gallonage units is increasing. As it increases, unless there is a corresponding increase in total consumption, it lowers the gallonage of older, existing units. I know of gasoline units now pumping over 400,000 gallons per month.

How should gasoline be sold?

Who can say? Most of the retailing units of today are stand-alone-units that rely a lot on gasoline margin to pay their costs. Except in unusual locations, gasoline retailing probably cannot be a stand-alone-business. When a great volume of gasoline is sold, it develops a great amount of customer traffic that can be of value to a multi-line retailer. Retailing combinations have been developed that can operate profitably on negative gasoline margin. As long as supply is available to these units, oil companies who try to stand alone with gasoline will have to subsidize their gasoline marketing operations with revenues developed from oil production and refining.

What will the margin on a gallon of gasoline be in the future?

What is the price differential in a given location that is necessary to develop 400,000 gallons of gasoline gallonage in a month? What is the value of 40,000 customers to a multi-line retailer? (400,000 gallons divided by 10 gallons per customer.)

The margin on a gallon of gasoline will hinge on this value. In the short run at least, this is possibly a negative margin. In the long run, it may be 2¢ a gallon. These new type gasoline retailers will build new competitive pressures into existing gasoline retailing units and force their modification, closure or subsidization. The pace of evolution in gasoline retailing is increasing. Evolution becomes a marketing revolution when the retailer down the street decides attracting customers is more important to his overall profits than developing gasoline margin.

Why should refiners subsidize stations and lose money in marketing?

You've got me. I've never understood this. I've always written it off to lack of vision, perspective and market planning. Marketing costs have increased and the cost of subsidization in the 80's is likely to be very great for those who try this route in order to maintain their market share.

Can buying gasoline be a pleasant experience?

What a different thought. That would be a powerful incentive to a lot of customers.

Is there going to be enough gasoline for everyone?

For those who don't learn to market gasoline better, there is going to be far too much. Absent price and allocation controls, the retail market will return to its old competitive ways.

Who ought to market gasoline?

People who know and practice good retailing principles. There are retailing principles and policies that have been the backbone of success for all great merchants. For the most part, these principles appear to be unknown to the oil companies.

People that understand and worry about customers, ought to become gasoline marketers. Gasoline marketers ought to try to understand and worry about customers.

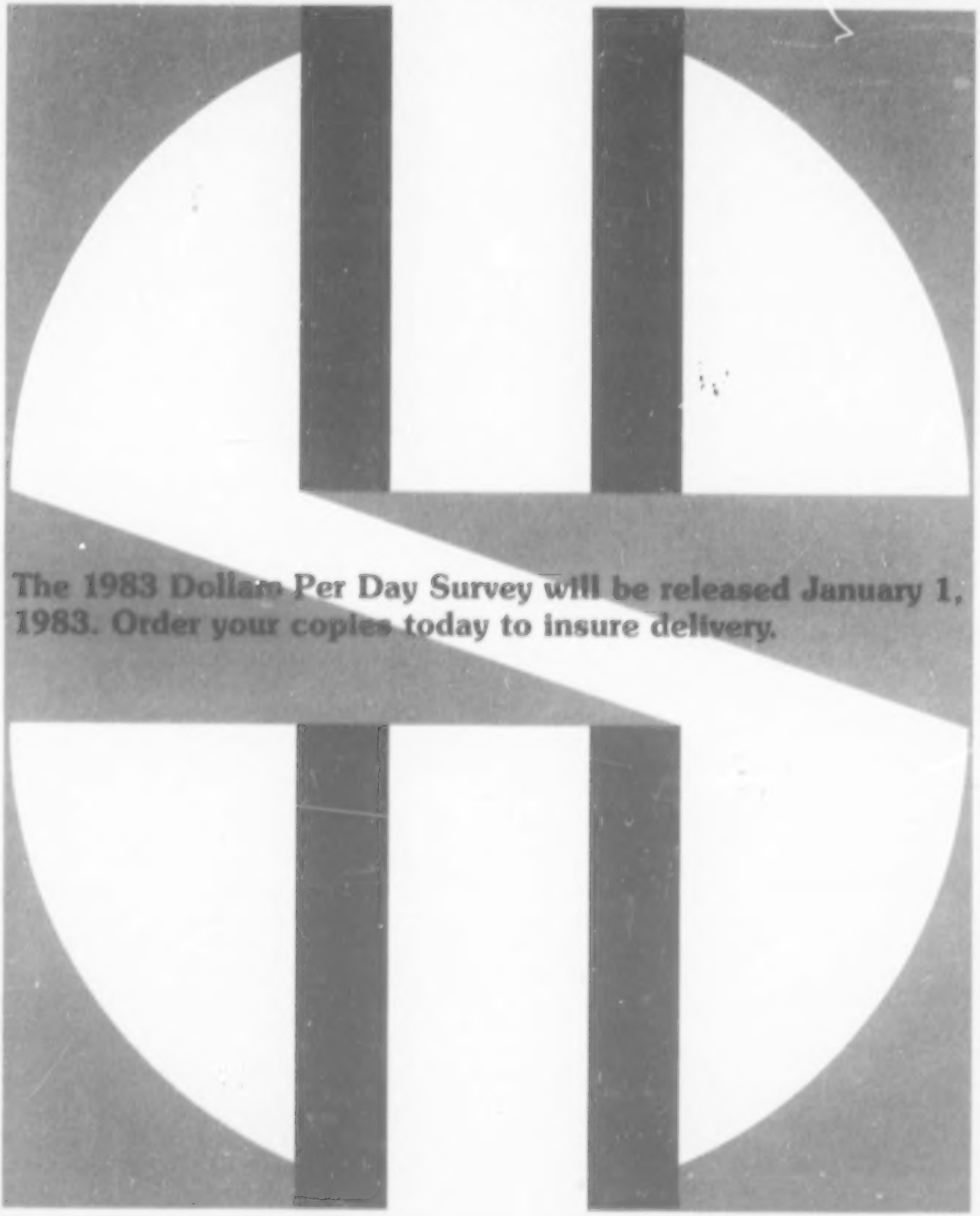
Successful retailers annual reports talk about value, service, satisfaction, guarantees, friendliness, cleanliness, and quality. They talk about upgrading the merchandise, the retail premises, and the value to the customer.

The cover of Albertson's annual report states, "It's good to shop in a well run store". Inside, it has sections entitled, "Well designed store; Variety of merchandise; Well trained employes; Modern distribution; Planning for the future; and Growing with our customers". The Sears annual report headings include Value, Service, and Satisfaction Guaranteed. McDonald's in their report discusses quality, nutrition and friendliness. Competent retailers know you have to please customers. Customers take their business to retailing units where they perceive that value is received.

Is there opportunity in gasoline marketing?

WOW! Is there! It's a massive business that's gone through a big change in it's marketing environment. Structural forces within the industry have kept it from acting on its own to meet their change in environment. The genie is out of the bottle, however, and market forces will require all companies either to act or react. The years ahead will undoubtedly see the rebirth of effective and efficient gasoline marketing.

1983 - THE TWELFTH ANNUAL DOLLARS PER DAY SURVEY OF THE SMALL FOOD STORE INDUSTRY



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ABOUT THE AUTHORS

This report was written and published by John, Lise, Ned, and Sally Roscoe. **John Roscoe** entered the gasoline business in 1964 when he installed the first remote-controlled self-service gasoline dispensing system at one of his food stores in Denver, Colorado. His company now operates 140 food and gasoline units in four western states. Gasoline volume in these units was 5,512 barrels per day last year, a 47% increase over the gallonage of the previous year. John is a farmer, oil and gas investor, and a stockholder in many oil companies. In addition to **What Do the 25 Largest Gasoline Companies Have to Say About Gasoline Marketing?**, he writes and publishes the **Annual Dollars per Day Survey of the Small Food Store Industry**. The **12th Annual Dollars per Day Survey** will be released in January 1983.

Ned Roscoe graduated from the University of Chicago in 1982. Since that time, he has traveled extensively in Australia and has studied gasoline retailing there. He is presently viewing Russian gasoline marketing as he travels across Russia on the Trans-Siberian Railway.

Sally Roscoe is a junior at the University of Southern California in Los Angeles. At this time, she is watching tanker movements in the Persian Gulf while attending a Semester at Sea. Upon completion of this world tour, she will return to finish her studies at USC.

Lise Roscoe designed the cover of this report. She presently operates a design and production facility, the Wildside, and is primarily concerned with point-of-purchase graphics for use in product sales and store decor.